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The University of San Francisco

BEING AND BECOMING PUBLIC SCHOOL TEACHERS:
CAREER MOBILITY OF CHINESE OVERSEAS-TRAINED TEACHERS
IN THE SAN FRANCISCO BAY AREA

A Dissertation Presented
to
The Faculty of the School of Education
Leadership Studies Department
Organization and Leadership Program

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Lily L. Chow
San Francisco
May 2011

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THE UNIVERSITY OF SAN FRANCISCO

Dissertation Abstract

Being and Becoming Public School Teachers: Career Mobility of Chinese
Overseas-Trained Teachers in the San Francisco Bay Area

Teacher shortage and retention has persisted in the United States for decades. Ethnic minority teachers are underrepresented in public K-12 schools as well as teachers for English learners. Untapped pools of overseas-trained teachers who are lawful permanent residents exist but are unemployed, underemployed, or working in other fields. To earn a local teaching credential, the immigrant bears the burden of proving equivalent knowledge and skills to re-enter her or his profession in the United States. At the time of this study, there was no research about overseas-trained immigrant teachers entering the teaching profession for primary and secondary public school students in United States.

Utilizing life story interviews and complexity theory, this study explored the relationship between career decisions and the social context of history, culture, and economic forces of five Chinese overseas-trained teachers who became public school teachers in the San Francisco Bay Area. Analysis attended to career attractors, aspirations, mobility, and commitment to learn how the participants became teachers, what they felt during their process of becoming teachers in their homelands and in California, and what their experiences meant to them.

Geographic location, its history, and parent expectations were the initial conditions instrumental to the participants' interests, education, identity, and career choice. Their decision to immigrate to the United States also meant being open and adaptable. Opportunities to re-enter the teaching profession called to participants' value of their prior

experiences, commitment to teaching, and attraction to regain their identity as teachers. In addition, the participants perceived that policy makers, credentialing institutions, and school principals had a narrow understanding of overseas-trained immigrant teachers' assets—prior knowledge, work experience, and transferable skills. Strict requirements and practices hampered rather than facilitated employment in California public schools for this group.

This study filled a gap in research and contributed to the understanding of one group of overseas-trained immigrant teachers and the interrelationship between individual agency, career decisions, and the contexts of social worlds. The research concluded with recommendations for practice and future research that considers the assets and benefits of overseas-trained immigrant teachers for the nation's teaching force.

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies presented in this work represent the work of the candidate alone.

Lily L. Chow

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Lastly, my father’s courage to uproot himself from his family in China and immigrate to the United States set the stage for my openness to change. My mother believes that if her initial conditions had been different, she might have earned a few doctorate degrees by now. This one is for you Mom!

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CHAPTER I: THE RESEARCH PROBLEM

Statement of the Problem

“Do I address him as Mr. Zi or Dr. Zi?” asked my Chinese immigrant mother. Zi’s business card showed the suffix PCA, which was the abbreviation for Patient Care Associate. My mother and I met Zi for a medical consultation at a clinic for which he was a member of a surgical team. Zi was fluent in Mandarin, Cantonese, and English and he was able to engage my mother in a conversation about a medical condition and procedure beyond my knowledge and fluency of Cantonese. Zi’s knowledge of eastern medicine and Chinese cultural beliefs and practices eased my mother’s anxiety. During a subsequent meeting, we learned that Zi was born in a small village in southern China, earned a medical degree, and practiced medicine in Beijing. He came to the United States to conduct research and realized that his passion was direct patient care and surgery. In spite of his medical training, licensure, and clinical practice abroad, Zi was denied a U.S. medical license to practice because his medical education was not deemed equivalent to medical education in the United States. In addition, he did not have local clinical experience as required by the state medical board. Zi learned that being a PCA would allow him to gain local experience and build a network of colleagues that could help him reach his goal of becoming a U.S. board-certified surgeon. At that point, my mother and I began addressing Zi as Dr. Zi; however, I noticed that his teammates always addressed him as Mr. Zi.

Through dialogue, a reciprocal relationship with Dr. Zi opened a window to his experiential reality. An immigrant whose profession required a license or credential, such as physician, dentist, accountant, lawyer, nurse, and public school teacher, was subject to an evaluation of equivalent overseas education and experience requirements by independent

organizations, licensing and credential institutions, as well as employers before she or he was granted a license to practice her or his respective profession in the host country.

However, some immigrant professionals, like Zi, faced the non-recognition of their prior education and experiences. This issue affected not only immigrants in the United States but in most postindustrial societies that received immigrants (Guo & Andersson, 2005; McCarthy & Vernez, 1997; Miller, 2008; Reitz, 2001).

More than an event, immigration has been a dynamic process—a system of mutual causality between sending and receiving areas within world market economies. Family reunification (spouse or partner) and employment (unstable employment and wage disparities in one country and shortage of workers in specific fields in another country) were two push-pull attractors that motivated people to emigrate (Isbister, 1996).

Education was another example of this push-pull attractor in which dearth and abundance of schools differ between nations as it is related to employment. Generally, the press has reported on the debate about recruiting overseas-trained professionals as a solution to the shortage of doctors, nurses, scientists, and engineers. However, few have reported on the career challenges that immigrants have faced, especially public school teachers.

Teacher shortage, which began in the 1940s, has been a persistent problem in various areas across the United States. Population growth has been one of the major reasons why this issue has persisted; however, it has not just been numbers but also the diverse heritage of our inhabitants. The country's demographic trends has resulted in a teacher population that no longer reflected the student population in terms of race, ethnicity, language, and culture (Jorgenson, 2000; Lewis, 1996). There have been specific shortages of minority teachers, teachers for English language learners, teachers for specific subject

areas such as math and science (Darling-Hammond & Sykes, 2003; Rong & Preissle, 1997), teachers for students with special needs (Boe & Cook, 2006), and teachers for students in rural and urban areas with high rates of poverty (Jorgenson, 2000).

These specific areas of teacher shortages have allowed school districts to petition for out-of-country teachers through the federal H-1B temporary work visa program. This program requires advanced planning in identifying and recruiting candidates abroad, validating their education credentials, petitioning for their visas, and obtaining state teaching certifications for them before the granting of temporary H-1B visas. These nonimmigrant teachers have been permitted to begin teaching soon after their arrival in the United States; however, their stay has been limited to three years with an extension option of three years. This temporary employment has been a retention issue of the teacher shortage.

An overlooked source of teachers has been the pool of overseas-trained and overseas-credentialed teachers who have immigrated to the United States as dependents of their citizen or immigrant spouses or other family members that bore financial responsibility for them and thus were lawful permanent residents. As dependents, their credentials were not a factor for immigration approval. Credentialing agencies require an independent evaluation of overseas-trained teachers' education, training, and practice to show equivalency to U.S. institutions and practices to uphold teacher quality standards. The U.S. Network for Education Information (2007), an arm of the U.S. Department of Education that provided international education information, stated, "recognition of non-U.S. teaching qualifications is...rare" (p. 7). This disclosure led one to question the evaluators' and employers' level of knowledge with every country's past and present educational and professional qualifying systems in their determination of equivalency.

Ultimately, non-recognition or non-validation of prior credentials and experience has made employment for this group in their chosen profession difficult (Salaff & Greve, 2003; Vallejo & Garcia, 2001; Vernez, 1999).

Additionally, local field experience has been a requirement of applicants who sought teacher credentials, but the route to an internship has been through a state commission approved professional teacher induction program. In essence, most overseas-credentialed teachers who wish to teach in K-12 public schools in the United States have had to go through a “re-education” process. The burden of proving knowledge and competence has hindered the career mobility of many immigrant professionals such that “migration breaks a career path” (Salaff & Greve, 2003, p. 449). Consequently, some overseas-credentialed teachers have been unemployed, underemployed, or employed in a different occupational field (Salaff & Greve, 2003; Vernez, 1999). That finding and the projected increases in K-12 student enrollment in high-immigrant receiving states led Vernez (1999) to suggest that overseas-credentialed teachers are a “potentially untapped supply [that] should be explored” (p. 83). The concurrent problem of teacher shortage and overseas-credentialed immigrant teachers who were unemployed, underemployed, or employed in other occupational fields calls for the need to better understand overseas-credentialed immigrant teachers as a group that could help alleviate teacher shortage.

Purpose of the Study

The purpose of this study was to investigate immigrant Chinese public K-12 school teachers’ perceptions about career attractors, commitment, and mobility. In addition, this study explored the situational factors that led these overseas-born trained or credentialed teachers’ decisions to adapt and pursue the re-credentialing process in

becoming California public school teachers. The focus of this study was to provide a framework for understanding the interrelationship between life events and career decisions of immigrant teachers before and after their migration to the United States.

The design of this study utilized a qualitative life history methodology. Five participants were native-born women and men of China, who earned their teacher training or credentials outside of the United States, immigrated to the United States, became California-credentialed teachers, and taught in the public school system at the time of this study. The data collection method was a series of face-to-face interviews.

Background and Need for Study

The United States faced its first teacher shortage in 1919 near the end of its third wave of new immigrants (Eliassen & Anderson, 1934). The Immigration Act of 1924 set quota limits on nationalities residing in the United States in 1920 (Naisbitt, Flaum, & Handlin, 2008) to control its population in terms of race, ethnicity, and class of its population. In late 1941, the teacher shortage, especially in elementary schools, became critical after the nation entered World War II. New births, new immigrants, and the end of the war contributed to a rise in student enrollment during the mid-1940s that exacerbated the situation (Maaske, 1951). In 1965, amendments to the Immigration and Nationality Act of 1952 ended nationality-based quotas (Naisbitt et al., 2008) that resulted in a more ethnically diverse population. In addition, an immigrant visa category preference system was established for U.S. citizen and lawful permanent resident sponsors. The priority of immigrant admissions at the time of this study were family-based followed by employment-based preferences.

This section begins with a brief overview of immigrants in the U.S. workforce with respect to social forces and follows with a look at the demographics of students and teachers in U.S. public schools. Next, the section describes the H-1B visa program followed by a report on lawful permanent residents with respect to overseas-trained teachers, and concludes with a synthesis of the factors that support the need for this study.

Immigrants in the U.S. Workforce

Oftentimes, immigrant professionals are not as able to secure positions as U.S.-born professionals with similar education and work experience for licensed and credentialed professions. Some immigrant professionals settle for lower-skilled jobs in their field. For example, an overseas-credentialed teacher works as a school receptionist. Other immigrant professionals accept work in entirely different fields from their homeland profession. This section reports data on immigrants in the United States and the differences between U.S.-born and overseas-born labor pools, employment status, and employment in the education sector to show trends in the U.S. workforce that immigrants face.

Social, political, and economic changes continued to create push-pull factors whereby population migrations crisscrossed the globe seeking to improve their lives. The United Nations (2009) estimated that in 2010, the United States hosted 20% of the world's immigrants (the most of any nation). In 2009, there were approximately 38.5 million immigrants (Batalova & Terrazas, 2010), including an estimated 11.1 million with undocumented status (Passel & Cohn, 2010). An average of 1.1 million immigrants became lawful permanent residents in each year of 2008, 2009, and 2010 (U.S. Department of Homeland Security [DHS], 2010b). More than 42% were new arrivals while 58% were visa class adjusters. Over 66% of immigrants obtained permanent residency through a

family-sponsorship, 13% gained residency through an employment-based program, and 16% entered as refugees or asylees. In the last decade, California was the top receiving state of immigrants, and in 2009, its top metropolitan areas of concentration were Santa Clara, Los Angeles, San Francisco, and San Mateo counties (DHS, 2010b).

The U.S. workforce consisted of 153.9 million workers who were 16 years old and over in 2010. Immigrants accounted for 15.8% (24.3 million) of the nation's labor force. Approximately 25% of overseas-born workers were employed in low-skill, low-pay service occupations in the industries of accommodation, food, domestic service, administrative support, waste management, and agriculture (U.S. Bureau of Labor Statistics, 2011). On the one hand, many immigrants had low levels of education, limited skills, and little or no English proficiency. On the other hand, other immigrants were highly-skilled, highly-educated, highly-paid and overseas-trained professionals. For example, medical doctors, lawyers, accountants, engineers, and schoolteachers were highly respected in their homelands, while in their host country, the labor market did not consider their credentials and work experiences to be valid (Batalova & Fix, 2008; Man, 2004; Purkayastha, 2005; Salaff & Greve, 2003). Table 1 shows that since 2006, the rate of unemployment continued to be higher for overseas-born workers than U.S.-born workers who were 25 years old and over and held a bachelor's degree and higher.

An analysis of the 2006 American Community Survey by Batalova and Fix (2008) found that in the fiscal year of 2006, the nation had over 7 million college graduates who were underutilized in the workforce of whom 1.3 million were immigrants. In California, 30% of college-educated skilled immigrants were underutilized. During the years of 2007 through 2010, almost twice as many U.S.-born workers, 16 years old and over, held

Table 1

Unemployed U.S.-born and Overseas-born Workers, 25 Years Old and Over, with a Bachelor's or Higher Degree

Year	U.S.-born Workers		Overseas-born Workers	
2010	1,736,000	4.4%	431,000	6.2%
2009	1,655,000	4.3%	448,000	6.4%
2008	932,000	2.4%	226,000	3.3%
2007	725,000	1.9%	168,000	2.5%
2006	714,000	2.0%	149,000	2.3%

Sources: U.S. Bureau of Labor Statistics, 2007, 2008, 2009, 2010, 2011

positions in the occupation sector of education, training, and library than overseas-born workers (U.S. Bureau of Labor Statistics, 2007-2011). (The occupation sector includes all types and levels of the respective institutions.) This may be because immigrants whose professions require a license or credential to practice are subject to an evaluation of qualifications because each nation has different systems of law, regulation, and culture.

The United States does not have a national standard for assessing education and credentials earned abroad, nor does it approve or certify evaluation agencies, so it yields authority to state boards to establish rules for the licensure of each regulated profession (Mattoo & Mishra, 2008; NAFSA: Association of International Educators, 2009). This is potentially burdensome for immigrants who are in the process of fulfilling credential requirements in one state but need to move to another state that has different requirements. General requirements of most licensed professions are verification of overseas education, training, and work experience as to their equivalence with U.S. programs, state examinations, and local experience (Mattoo & Mishra, 2008; U.S. Network for Education Information, 2007).

Demographics of Students and Teachers

Immigration has profoundly challenged the way U.S. public schools educate children who have a wide range of linguistic, cultural, and socioeconomic backgrounds. Children of immigrants constituted more than one in five children in the nation in 2007 and represented more than 21% of the school-age population in 2006 (Fortuny, Capps, Simms, & Chaudry, 2009). This section reports the trends in school populations and the supply of teachers to better understand the challenges.

Since 1988, the majority of U.S. public K-12 students who are White have steadily declined from 68.3% to 55.5% in 2008 (Aud et al., 2010). In contrast to the ethnic and racial diversity of the student population, 83.1% of the 2.9 million U.S. public school teachers were White (Coopersmith, 2009). Although the percentage of teachers who are White has decreased from 88.3% in 1988 (Hammer & Gerald, 1990), the ethnicity of the teacher population has not kept pace with the demographic changes of the student population in many public schools (Coopersmith, 2009; Lewis, 1996).

The human qualities of ethnicity, race, gender, and socioeconomic status that compose the members of communities shape their needs, which make geographic location important in terms of allocation of services and resources. Demographics of student and teacher populations vary between and within states. Federal, state, and local governmental agencies have compiled population data from a variety of surveys at various times, which has made reporting comparable data difficult. Table 2 illustrates an example of the ethnic and racial composition of students and teachers at the national, state, and local levels. California and San Francisco represent the state and local comparison groups with the nation because the research setting for this study was the San Francisco Bay Area.

Table 2
Ethnic Composition of Students and Teachers

Ethnicity	United States		California		San Francisco Unified School District	
	Students	Teachers	Students	Teachers	Students	Teachers
White	55.5%	83.1%	27.0%	69.2%	10.7%	48.8%
Hispanic	21.7%	7.1%	50.4%	17.4%	23.7%	9.8%
African-American	15.5%	7.0%	6.9%	4.2%	11.0%	4.6%
Asian	3.7%	1.2%	11.0%	6.7%	45.9%	20.3%
Pacific Islander	0.2%	0.2%	0.6%	0.3%	1.3%	0.0%
American Indian or Alaska Native	0.9%	0.5%	0.7%	0.5%	0.4%	0.4%
Multirace or No response	2.6%	0.9%	3.4%	1.8%	7.0%	16.1%

Sources: Aud et al., 2010; California Department of Education, 2010a, 2010b; Coopersmith, 2009

The mismatch between student and teacher populations has been an important issue when addressing the emotional needs of students in terms of identity, sense of belonging, and cultural learning differences and the degree of culturally responsive teaching methods and practices of teachers (Ferguson, 2002; McKown & Weinstein, 2008; Ogbu, 2003; Olsen, 1997). Underrepresented teacher groups who shared cultural heritages, languages, and orientations with students, oftentimes, served as role models and cultural brokers that helped students with school practices such as attendance and behavior (Gay, Dingus, & Jackson, 2003). Additionally, these teachers provided learning opportunities for all populations to understand broadly about ethnic, racial, and cultural diversity and specifically, the realities each group represented.

Feistritzer (1998) estimated that at least 4 million people were qualified to teach but did not. Studies on teacher shortage showed that the problem was not supply but

rather an issue of recruitment and retention that Ingersoll (2003) called the “revolving door” because the turnover of teachers was high (p. 11). One third to one half of new teachers left the teaching field after three to five years, which cost the nation an estimated \$7 billion annually (National Commission on Teaching and America’s Future, 2007) with respect to draining school funds for new recruitment, hiring bonuses, training, and professional development. A study exploring the effectiveness of San Francisco Unified School District practices on recruitment and retention of teachers by The New Teacher Project (2009) found that “two of every five teachers plan to leave the district in the next five years” (p. 53). That finding was based on the survey responses from 48% of 168 probationary teachers and 38% of 644 permanent (tenured) teachers. Factors that prevented many districts from attracting and retaining the best applicants were job dissatisfaction, bureaucratic qualifying requirements, other jobs that offered higher financial rewards or greater opportunities for advancement (Aud et al., 2010; Ingersoll, 2003; Jorgenson, 2000), and “interstate barriers to teacher mobility” (Darling-Hammond & Sykes, 2003, p. 3). These studies did not report the participants’ type of teacher preparation program, that is, a traditional or an alternative certification program. Maul (1965) stated, “A dispassionate look must be taken at the trend toward an ever-increasing number of sources of new teacher supply” (p. 433).

The H-1B Visa Program

Since 2000, a growing trend among school districts with specific area teacher needs has been the petitioning for and hiring of out-of-country teachers through the federal H-1B temporary work visa program. H-1B is a nonimmigrant classification for an overseas citizen who has at least the equivalent of a bachelor’s degree and seeks

admission to the United States for temporary residence and short-term work in his or her field of expertise for which there are no qualified native workers. The H-1B visa is valid for three years with an option to extend for an additional three years. The employer or sponsor handles the documentation process of employing an overseas worker that includes petitioning the U.S. Department of Labor and U.S. Citizenship and Immigration Services, evaluating qualifications, obtaining temporary state teaching license and visa approval; and thus, controls the visa (Happell, 2009).

Drawing upon the data of H-1B petitions approved by the U.S. Department of Labor, Barber (2003) estimated that during the fiscal years of 2000 through 2002, U.S. public schools employed more than 6,700 public school teachers who held H-1B nonimmigrant visas. An additional 3,000 public school teachers held J-1 cultural exchange visitor visas, which were valid for one year and renewable two times. In the fiscal years 2004 and 2005, the most recent data available, elementary and secondary schools employed 4,536 new and 6,599 continuing teachers with H-1B visas (U.S. Citizenship and Immigration Services, 2006). However, the data did not make any distinction between public and private schools. California K-12 public schools employed the second highest number of teachers with H-1B visas in the fiscal year of 2002 (Barber, 2003).

Soon after arrival in the United States, H-1B nonimmigrant teachers were permitted to begin teaching, that is, this group was not subject to the credentialing requirements of lawful permanent residents. However, any person desiring to stay and teach in public schools beyond the term of the visa, by changing to a different visa class or permanent residency, was subject to the state credentialing requirements. Happell (2009) reported that some recruiting agencies were employers of overseas-trained teachers and contractors

providing teachers to schools. Happell found that some of the agencies exploited overseas-trained teachers by engaging in fraud and intimidation, providing substandard housing, and failing to pay wages as stipulated by immigration law. These forms of devaluation reduced the overseas-trained teachers likelihood of long-term stay in the United States. This group of teachers fostered cross-cultural understanding; however, their temporal visa status did not lessen the retention problem.

Lawful Permanent Residents in the United States

A family-sponsored immigrant was classified as a dependent and the sponsor bore financial responsibility for her or him. The petition to sponsor an overseas-born relative did not require credentials of the relative for immigrant visa eligibility. Oftentimes, this group of immigrants sought employment after arriving in the United States and then learned that their overseas credentials were barriers to employment in their chosen profession. The No Child Left Behind Act of 2001 (Pub. L. No. 107-110, § 9101) mandated that all teachers of mathematics, science, and English language arts be “highly qualified” by possessing demonstrated knowledge and teaching skills in each academic subject she or he taught. Accordingly, earning a teaching credential for overseas-trained teachers required an independent evaluation of overseas transcripts of previous educational coursework, degrees earned, teacher preparation, and field experience as to their equivalency with regionally accredited institutions in the United States. In addition, local field experience was a requirement of applicants who sought teacher credentials, but the route to an internship was through a state commission-approved professional teacher induction program. Those who did not meet the state’s qualifications but wished to teach in public schools had to return to school or accept a lower position, thus marginalizing

their prior training, knowledge, experience, and skills. A study about immigrant women in the U.S. labor market from 1960 to 1997 by Vernez (1999) found that immigrant women were “less likely to fill occupations requiring certification” (p. 71) and that the number of immigrant teachers during the period of 1970 to 1997 declined by 29%.

Darling-Hammond (2000) and Ingersoll (2003) reported that new teacher graduates were the largest pool of teachers and approximately 60% of new teacher graduates entered teaching jobs immediately. During the fiscal year of 2009, the California Commission on Teacher Credentialing (2010a) granted 21,750 teaching credentials for K-12 classrooms of which approximately 400 new credentials were issued to overseas-trained teachers (Commission on Teacher Credentialing [CTC], 2010b). This number of new credentials awarded to overseas-trained teachers was similar to the number awarded the previous year but was still well below the 1,200 granted in the fiscal year of 2002 (CTC, 2009). Over 55% of the overseas-trained teachers received single subject credentials with the majority in the subjects of mathematics (13%) and science (12%). In the fiscal year of 2006, the most recent data available, the top five originating countries of overseas-trained teachers were the Philippines (42%), Canada (10%), India (9%), Mexico (5%), and Spain (4%) (CTC, 2007). In comparison to the number of unemployed and underutilized highly skilled immigrants, the number of overseas-trained teachers earning teaching credentials continued to be low.

Assuring that teachers were highly qualified was important, but onerous requirements were perceived as denying rather than facilitating access to the profession. Requiring courses about United States history and teaching practices was reasonable, but this group of overseas professionals were not “new” in that they were experienced

teachers with some of them from top ranking high-stakes testing countries. Some were well-equipped to help raise the test scores of U.S. public school students, but this remained unknown unless they received the opportunity to demonstrate their expertise. Overseas-trained teachers (individually and collectively) had “funds of knowledge” (Moll, Amanti, Neff, & Gonzalez, 1992, p. 132)—the accumulated skills, abilities, ideas, and practices essential to functioning and well-being—yet many social forces hindered their career advancement. The large number of overseas-credentialed teachers who did not pass the evaluation process set forth the need to better understand the group of committed teaching professionals who passed as a vital resource of mutual benefit to society.

Theoretical Foundation

The theoretical perspective for this study was complexity science, also called complexity theory or nonlinear dynamics theory, in exploring career as emergent process. Complexity science presents a world view in which everything is interconnected in nested networks of relationships. Complexity science aims to help one understand entities as wholes while being a part of the interacting social, cultural, economic, and political entities one is trying to understand.

Twentieth century mathematician and human ecology theorist Jacob Bronowski (1978) asserted that “the universe is totally connected, that *every* fact has some influence on every other fact” (p. 69) and further that “we *cannot* extricate ourselves from our own finiteness” (p. 70). Each person is born into a history of norms that is her or his tradition, core values, and cultural customs being of time and place established by the interaction of a group of people. A nest of socially constructed interdependent entities cultivate her or his identity. At the center of the nest is family and then radiates outside to one’s local

community, workplace, state agencies, national institutions, and world organizations. Therefore, “an individual is an inseparable part of an interrelated system” (Vazquez-Nuttall, Li, & Kaplan, 2006, p. 87).

Human beings consist of interconnected autonomous systems, like the nervous and immune systems, that constantly interact, self-organize and adapt internally and to their environment to maintain life without losing their basic identity; thus, they are complex adaptive entities (Holland, 1995; Kaufman, 1995). Survival is the foundation of all living organisms each requiring certain needs, such as physiological, emotional and social. Balance and certainty are conditions that entities believe are most desirable. Yet, instability, uncertainty, and social influences motivate entities to intentionally pursue getting their needs met, thus, adapting to their environment (Goerner, 1999; Toffler, 1984). Each individual has multiple identities, for example, a woman who is a mother, daughter, sister, friend, and teacher—her profession, with different and overlapping needs, knowledge, and skills that she negotiates between and adapts accordingly.

Being embedded in the world means that organizations, societies, cultures, and economies are other examples of interdependent complex adaptive entities. In essence, people are individually and collectively complex webs that “create intricate structure...of order” (Goerner, 1999, p. 128). Their pattern of behaviors tend toward simplicity rather than “complicated.” Focusing on interconnected relationships, Bloch (2005) applied complexity theory to career development in illustrating and advancing the concept of “career as a complex adaptive entity” (p. 195). Each entity is self-similar to each other in the global society and likewise, one’s career is a fractal of an individual’s life developed throughout one’s lifetime (Bloch, 2004, 2005).

Studies on careers of overseas-born immigrant professionals and the shortage of minority teachers in U.S. public schools have used human capital theory (Salaff & Greve, 2003), sociocultural theory (Beyon, Ilieva, & Dichupa, 2004; Jorgenson, 2000), and institutional theories of race, ethnicity and gender (Jorgenson, 2000; Man, 2004; Rong & Preissle, 1997; Zhou, 2000) to show causal relationships to problems. However, each of these studies provides only a partial view of the lives of their study participants because they do not account for small, seemingly trivial, unpredictable events that disrupt the pattern of order and their relationships with other internal and external entities. The significance of such variables is the individual's view of the events—either problems or opportunities, that affect her or his attitudes, behaviors, decisions, and actions (Mitchell, Levin, & Krumboltz, 1999)—as she or he oscillates between order and disorder, each reinforcing the other.

Complexity theory was used to examine a whole person, to interconnect not only primary human dimensions of birthplace, ethnicity, gender, and race but also, secondary human dimensions that were changeable, such as education, work experience, language, socioeconomic status, religion, and geographic location. The complexity science concepts that this study used were sensitive dependence, attractors, networks, and emergence.

Sensitive Dependence

Predicting behavior is an occupation and fascination of people in various fields of study. Interest in weather forecasting led meteorologist Edward Lorenz (1963, 1993) to examine long-term weather patterns using a computer simulation program. In one instance of redrawing a pattern, he inputted data from the previous output using three decimal places instead of the six decimal places stored in the computer's memory. At a

certain point in the new drawing, the direction of the pattern became entirely different from the original drawing. The rounding of the number seemed inconsequential, but it illustrated the phenomenon of sensitive dependence on initial conditions. That is, any difference in the starting states of like entities eventually resulted in different outcomes.

Primary human dimensions are the initial condition of one's life that are not self-selected and not naturally reversible. One does not choose her or his own time of birth, geographic location, and parents. This is the initial condition of sensitive dependence in which the place of a child's birth is developed or undeveloped and during a time of peace or political strife that renders her or him enriched or impoverished at the first moment of her or his life.

As demographers and economists study the past to predict the future, they do not accounting for the unpredictable. At the macro-level, rural areas with mainly agribusinesses are dependent on nature—the weather, and single-product dependent economies like oil in Nigeria are subject to the fluctuations in world market prices. Deregulation of the foreign exchange market leads to currency devaluation that result in higher populations living in poverty. At the meso-level, social forces, such as political instability, riots or pollution affect day-to-day life of communities. At the micro-level, health-related issues, such as disease or death create chaos within a household. Individuals and groups experience any and all of these types of events at the same time for they are interconnected.

Human instinct is to seek means for survival and at any given time, one's actions are motivated by one of five sets of basic needs: physiological, safety, belongingness and love, esteem and self-actualization (Maslow, 1970). These needs are not strictly sequential especially beyond the safety needs for “most behavior was multi-motivated...determined

by several or *all* of the basic needs simultaneously rather than by only one of them” (Maslow, 1943/2005, p. 174). Certain circumstances cause a person to drop to a lower level. Yet, sensitive dependence also leads to chance events—opportunities to change one’s secondary dimensions if one is open to them. Thus, small changes lead to large effects based on the initial condition of the entity. In this study, the initial conditions of historical, cultural, economical, and political situations of time and space framed the participants’ entry into the world. The concept of sensitive dependence addressed unpredictable disruptions to the initial conditions and how participants responded.

Attractors

Generally, people are motivated by their desires and goals—*attractors*. In complexity science, patterns of response behavior by interacting entities that either limit or facilitate change and growth are called *attractors*. There are three types of limiting attractors: (a) a point attractor refers to a fixed-point or state that the entity returns to repeatedly; (b) a pendulum attractor refers to an entity that moves back and forth between two states; and (c) a torus attractor refers to an entity that moves around and around in a circular pattern (Bloch, 2005). These attractors produce order and stability yet limit growth. Uncertainty, potentially, leads people to retreat for survival and to maintain a sense of order. By contrast, *strange attractors* promote growth in that they are nonlinear and sensitively dependent on initial conditions (Kellert, 1993).

Culture is a system of knowing and doing developed from the united learning of many individuals. Woven together by shared history, geographic location, language, belief, and social status, this unity of human beings share values, traditions, norms, worldviews, and ideologies that pass from one generation to another (Goerner, 1999;

Nieto, 2000; Smith, 1999). Culture is dynamic in that it changes with the addition and subtraction of entities in context with time. “Existence is a dynamic concept, implying eternal dialogue between man and man, between man and the world, between man and his Creator. It is this dialogue which makes of man an historical being” (Freire, 2007, p. 14).

When a person appears in the world, is the time in which questions about biological and cultural identity rise. The history one is born into is one’s family that provides experiences to build one’s funds of knowledge for how one ought to be (moral principles), what is good (values) (Stacey, 2005) and his or her responsibilities to hominization (Freire, 2007; Yu, 1998, 2006) as the source of attractor development. Culture and history condition one’s thinking but does not chain one to that stance. “Whatever his state, man is an open being” (Freire, 2007, p. 13). A critical mind and consciousness enable one to break from her or his past, for example, religious belief, if she or he chooses to do so in the ongoing process of becoming.

Stories develop from memories of experiences, culture, and informal learning that “form the strategy of our imagination. They are essential tools of personal identity and community building since they tell us individually and collectively, who we are; what our purpose is; and how we connect, or don’t, to the whole” (Markova, 2008, p. 43). The concept of attractors in this study identified contextual situations that provoked participants’ emotions leading to their personal and professional decisions and actions that evolved from the past to present behaviors.

Networks

Sociologist Manuel Castells (2000) and physicist Albert-Laszlo Barabási (2003) defined a network as a set of interconnected nodes (individuals, groups or organizations)

which are the intersection of paths. For example, smugglers are nodes of clandestine acts that potential migrants meet in the migration network. Popular nodes have more relationships (or connections); therefore, a newcomer is more likely to meet someone from a highly connected node. New nodes prefer to attach to popular nodes, and in turn, “a few highly connected hubs emerge” (p. 87). For example, California, New York, Florida, Texas, New Jersey, and Illinois are hubs because they receive the most immigrants in the United States, and the United States is the largest hub among nations receiving immigrants. These states are also the hubs of planning, marketing, managing, and financing transnational economies. Learning stems from entities connecting to other entities in networks and the knowledge gained is used for survival and growth. Thus, networks are open systems in constant change and competition for new nodes and links. As networks spread over a wider area, its rate of growth increases rapidly with the size of the whole network and entities in the network benefit from the increasing number of connections (Barabási, 2003; Castells, 2000). Opportunities for learning decline when an entity is outside of the network.

At the individual level, Granovetter (1973, 1983) advanced the social network theory by asserting that the type and value of information and resources was related to three strengths of interpersonal ties: (a) strong ties; (b) weak ties; and (c) absent ties. Strong ties are family and close friends of whom the degree of emotion and trust is high and mutual. These people provide supportive information and likely overlapped with one’s knowledge. Weak ties are acquaintances who generally know people that one did not know. These people have access to specialized information and resources different

from one's own social circle and they bridge social distance. Absent ties are people one does not have a relationship and people who one does not note as important.

Migration, as a dynamic process, utilizes nodes of information networks such as kinship, friends, or colleagues both at home and abroad. On the one hand, these people are strong ties that provide information on housing, jobs, documents, border crossing tips that include finding and dealing with smugglers, and destination contacts (Isbister, 1996; McKenzie & Rapoport, 2006). The benefits are reduction of migration costs (McKenzie & Rapoport, 2006) and reduction of stress “to change culturally: to learn a new language and develop new skills and new ways of thinking” (Isbister, 1996, p. 117). On the other hand, weak ties, with their specialized knowledge, different social circles, and ability to connect two social networks are more valuable (Granovetter, 1973), especially for immigrant professionals (Bagchi, 2001). Immigrants bring their economic ties (from their experiences in the sending country) to the United States, which contribute to global economic interdependence. Network structures transform because “migration involves social negotiation of new relationships both within and across networks” (Tilly, 1990, p. 87). The concept of networks in this study examined the types of ties and strength of ties that participants developed throughout their lives and used in their career decisions.

Emergence

The phenomenon of emergence is one in which a complex adaptive entity creates a new form, pattern, unexpected structure, decision, or process that is uncharacteristic with its natural attractors (Goldstein, 1999). Oftentimes, the behavior surprises others as well as the entity. Energy interweaves primary and secondary human dimensions in a back and forth flow to fulfill one's need to be functional and whole. Adapting derives

from learning and as knowing increases; the entity changes and becomes something different. In this study, the concept of emergence examined uncharacteristic decisions and actions of the participants, what those acts meant to the participants, and the evolution of their identities as teachers.

Summary

In summary, complexity theory is the science of connectivity. It draws upon the natural human tendency to understand relationships—subsuming linear structure and function, cause and effect, predictability and control—in uncertainty, acceptance of non-local causes, subjectivity of observer and the observed (Bloch, 2005) “to see similarities among seemingly disparate phenomena” (Davis & Sumara, 2006) especially chaotic events, processes, organizations, and entities. In many respects, it is a way of thinking or seeing—a worldview in which all life is self-organizing, self-adapting, interdependent, dynamic, and emergent.

Attractors influence individual career decisions (Pryor & Bright, 2007). For example, one attractor to teaching is providing service to others that give meaning and purpose for that individual’s existence, which is interrelated to his or her spirituality (Bloch, 2004). Yet, decisions are susceptible to unpredictable chance events (Bright, Pryor, & Harpham, 2005) that facilitate or hinder career mobility. Hence, small events result in upheaval; thus, careers are sensitively dependent on initial conditions both positive and negative, and external influences. How one addresses disruption is interrelated to the degree of openness to change and phase transitions between chaos and order (Mitchell et al., 1999). Complex adaptive entities embody emergent possibilities that exceed the sum of their interconnected parts. Complexity theory helps reveal patterns to further

understand who participants in this study are, how they interpret, adapt or integrate, and emerge in their host society by their decisions.

Research Questions

This study investigated the perceptions of overseas-born trained or credentialed immigrant Chinese public K-12 school teachers about career attractors, commitment, and mobility. In addition, this study explored the situational factors that led this group in their decisions to adapt and pursue the California credentialing process. The focus of this study was to provide a framework for understanding the interrelationship between life events and career decisions of immigrant teachers before and after their migration to the United States. This study addressed the following research questions:

1. What were the attractors and aspirations of overseas-born trained or credentialed teachers before they became teachers?
2. What factors led to overseas-born trained or credentialed teachers' attractors, perceptions, and expectations of their profession and aspirations for their career before emigration?
3. How did personal history, networks, and institutional experiences influence the decision of overseas-born trained or credentialed teachers to pursue the re-credentialing requirements set by the California Commission on Teacher Credentialing?
4. What patterns of sensitive dependence did overseas-born trained or credentialed teachers associate with their experiences in seeking teaching positions in California public schools and their commitment to the teaching profession?
5. What were the forms of adaptation and attractors that led overseas trained or credentialed teachers to emerge as U.S. credentialed teachers?

Definition of Terms

Aspiration. A person's desire to attain personal qualities of moral character, occupational goals, and type of profession for one's career.

Attractors. In this study, attractors were the forces or constraints that affected a participant's career choice and commitment. For example, an immigrant, whose goal was to re-enter the teaching profession, was constrained if she or he resisted or was indecisive about trying alternative paths to reach her or his goal. One's values and meaning in life facilitated creativity and action to reach goals.

Bilingual Crosscultural Language and Academic Development (BCLAD) Certificate. A credential that authorized a teacher to facilitate English learners' acquisition of English and academic subject matter using English and learners' native language. The certificate was awarded to a teacher after she or he passed six examinations about first and second language development, methodologies and theories about bilingual education, culture and diversity, and methodology for primary language instruction. The certificate was a supplement to a teacher's multiple subject, single subject, or special education credential.

California Basic Educational Skills Test (CBEST). An examination required of individuals who seek admission to an accredited teacher preparation or services credential program, apply for a teaching or services credential, emergency permit, or seek employment in California (<http://www.cbest.nesinc.com/>). The test measures an individual's proficiency with basic reading, writing, and mathematics skills in English.

Calling. An inner feeling that one has about one's unique talents and circumstances that becomes the essence of her or his profession. Serving in the called profession evokes a sense of meaning and purpose that is self-fulfilling in validating one's career decisions.

Career mobility. The ability to move between different levels in an occupation and the change from one occupation to another throughout one's lifetime.

Chinese overseas-trained teacher. In this study, a Chinese overseas-trained teacher was a person who was born in China, including Hong Kong and Taiwan, received teacher education and training outside of the United States, and immigrated to the United States as a permanent resident or became a permanent resident.

Commitment. A decision of an individual to dedicate her or his time and efforts to a task or purpose. Becker (1960) suggested that commitment to a profession stemmed from an individual's value of her or his funds of knowledge and its loss to her or him if she or he quit the profession. In this study, commitment to the teaching profession was a process in which overseas-trained teachers determined the value of their accumulated knowledge, skills, training, and practical experiences and the loss of these achievements when faced with an opportunity to quit the profession of public schoolteacher.

Complex adaptive entities. A composition of interacting agents that have the capacity to adapt and self-organize in response to their non-equilibrium environments internally and externally. In this study, the participants were the complex adaptive entities who learned new cultural norms and integrated them with their own personal needs and values to fit the U.S. cultural context of job-seeking practices and employment requirements.

Emergence. A phenomenon in which uncharacteristic actions by a complex adaptive entity resulted in a new form, pattern, structure, or process. In this study, participants' new learning and doing added to their funds of knowledge—an irreversible process—such that their identities emerged anew and integrated with their environment.

Emigrant. A person who either chose or was forced to leave her or his native country and settle permanently in another country. In this study, participants chose to emigrate from China and settle permanently in the United States.

Hub. A central place of activity within a network where an abundance of people converge and diverge. The San Francisco Bay Area and schools were two examples of hubs in this study. In a social network, a person who is a central point of connection for and between people is a hub.

Immigrant. Any person not a U.S. citizen or national accorded the privilege of residing permanently in the United States (U.S. Department of Homeland Security, 2009).

Individual agency. An interactive human process of opportunity and empowerment by which a person is actively involved in making meaningful choices and taking ownership of actions to affect change in shaping her or his destiny.

Institutional experiences. Knowledge gained from direct participation with formal organizations in sectors such as education, religion, and health care and foundational relationships, such as family and marriage that govern the behavior of individuals.

Lawful (legal) permanent resident. An overseas citizen granted lawful permanent residence in United States with the right to work permanently anywhere in the country, own property, and attend public schools, colleges, and universities (U.S. Department of Homeland Security, 2009).

Link or tie. An interdependent pathway such as kinship, friendship, beliefs, and common interest, that connect one node with another node for sharing information in a network. In this study, the strength of the relationship or tie between nodes resulted in different outcomes.

Networks. A group of interconnecting nodes (people and things) that communicate with each other for the exchange of needs to fulfill and sustain life as with the exchange of energy for biological functions, information for knowledge, socialization for personal and professional relationships that together led to self-actualization. In this study, participants' social networks were the people who were instrumental in their personal and professional lives. For example, family, teachers, persons of faith, employers, friends, and acquaintances were some of the nodes and links that influenced a participant's interests and career decisions.

Node. In a network, a node is a person, group, or organization that has a network of relationships connected by links. Participants, families, and schools were some of the nodes in this study.

Overseas-trained (foreign-trained) or credentialed teacher. An overseas-trained teacher is an immigrant who was educated in a post-secondary teacher preparation and training program in her or his country of origin. She or he taught Pre-K or primary school students. An overseas-credentialed teacher is an immigrant who held a four-year undergraduate degree from a teacher education college and a teacher certification or license from her or his country of origin. Generally, she or he taught secondary school students. In this study, overseas-trained and credentialed teachers were educated in subject matter and pedagogy and training included a period of student teaching in Hong Kong, Taiwan, or mainland China.

Sensitive dependence. A phenomenon in which the initial condition of an entity was such that a small change resulted in a large effect. In this study, examples of sensitive dependent conditions were a participant's economic situation before immigrating, visa

category, degree of English and U.S. cultural fluency, social and occupational networks in China and the United States, and unplanned events that facilitated or hindered career mobility.

Situational factors. Controllable or uncontrollable internal and external circumstances that contribute to certain conditions to which a person then responds. English fluency is a controllable internal factor for an immigrant seeking employment in the United States. The factor is controllable because one can increase one's level of fluency. Weather is an uncontrollable and unstable external factor in which a drought could ruin a family's farm crop and can no longer afford school fees because of the income loss.

Spirituality. The unity experience of mind, body, self, and world that sustains one's beliefs. It is the experience of inseparability and interconnectedness in the universe. This essence of being is common to all complex adaptive entities (Bloch, 2004; Markova, 2008).

Visa. A legal document that permitted an overseas person to travel to another nation and then at the port of entry, immigration officials granted or denied permission to enter. An H-1B visa was a nonimmigrant classification of an employer sponsored overseas-born person for admission and temporary residence in the United States to work in a "specialty occupation" such as medicine, health, education, law, engineering, high-technology, physical sciences, social sciences, or arts that was her or his field of expertise. The nonimmigrant was required to hold at least the equivalent of a bachelor's degree or had distinguished merit and ability as required by the specialty occupational field (U.S. Citizenship and Immigration Services, 2006). In this study, some participants initially held an H-1B or other nonimmigrant class of visa, for example, foreign student and later changed to a different visa category or permanent resident status. Participants' career decisions were conditioned on their class of visa.

Limitations

This qualitative study investigated perceptions about career attractors, commitment, and mobility, as well as the situational factors that influenced career decisions of overseas-born public school teachers in the San Francisco Bay Area who earned their first teaching credential outside of the United States. The selection criteria for participants, that is native-born women and men of China who were teachers trained or credentialed outside the United States and in California, affected the generalizability of the study to specific population groups in terms of nativity, ethnicity (same and other), race, and geographic location. While the sample of five participants was sufficient for this in-depth exploration, the findings were not generalizable to the larger population of overseas professionals.

This study used a whole person approach in which participants recalled activities and events to tell their life stories. Participants may have felt homesick with memories of their homeland and possibly anxiety in thinking about their experiences. Consequently, a limiting factor of this study was the memory of the participants with respect to accuracy, the possibility of omitting negative events, deeming some events insignificant, and forgetfulness.

Biases were especially difficult to recognize in oneself. The researcher's biases limited this study with respect to interpretation of the participants' verbal and non-verbal communications. Nevertheless, the researcher took steps to minimize biases and limitations.

Significance

The significance of this study was fivefold. First, the holistic approach of this study enabled understanding of the whole person, as the participant was (Buber, 1923/1996) and revealed the interrelationship between career decisions and human, social, and cultural capital of individuals. These findings provided a level of awareness

for future emigrant professionals, with similar characteristics and desire to teach in U.S. public K-12 schools, to draw upon as they negotiated their own career paths as immigrants.

Second, the commitment to increase the number of minority public school teachers and teachers for English language learners was a commitment to serve the needs of the ethnically and racially diverse student population. The findings of this study revealed that policy makers, credentialing institutions, and school principals had a narrow understanding of overseas-trained immigrant teachers' assets—prior knowledge, work experience, and transferable skills. In addition, this study revealed practices that hampered rather than facilitated employment in California public schools for this group.

Third, this study filled a gap in the research about overseas-trained immigrant teachers in U.S. public schools. Fourth, this study added to the body of work on complexity science as applied to the social sciences and careers. Complexity science and the life history method, together, revealed patterns of relationships to better frame the parameters of the problem. Historically, changes in global economies were related to global labor markets and the movement of people. When a nation had a need for workers of specific professions or skills, it relaxed immigration policies. In turn, when the need was fulfilled, it tightened immigration policies. Nonimmigrants by definition are aliens, which dehumanizes them as “Others” as a justification for excluding them from many basic benefits. The construct of professionalism was the notion of production and skills in which the hierarchy of credentials was related to power and hegemony by nations receiving immigrants. This study respected the history of xenophobia and racism such that “Connecting is related to issues of identity and place, to spiritual relationships and community wellbeing” (Smith, 1999, p. 149).

Lastly, all individuals were worthy of respect and Austrian philosopher Ivan Illich (1971) asserted that one of the purposes of “a good educational system [is to] empower all who want to share what they know” (p. 76). Truths from the voices of the oppressed will bring them from the margins into the center. Employers, academics, and policy makers may recognize their own biases and gain understanding of their own power—their actions or inactions. In the spirit of shared understanding, this study provided the opportunity to nurture “learning webs” (p. 72) where people flourished beyond national borders.

Summary

This chapter identified the interrelated problem of ethnic teacher shortage and the career mobility of overseas-trained immigrant teachers as an untapped source. The background of the problem set forth the objectives, intent, and rationale for using complexity science as the theoretical foundation for the study. In addition, this chapter established the limitations and significance of the study.

Confucius said, “To say you know when you know, and to say you do not when you do not, that is knowledge” (Lau, *Analects* 2:17). Educating oneself about the experiential lives of some of our immigrants increased one’s understanding of the issue at hand. The next chapter reviews empirical studies relevant to employment experiences of overseas-trained immigrant professionals. In addition, the review examines studies about career commitment.

CHAPTER II: REVIEW OF LITERATURE

Non-recognition of education, training, and practical experience abroad has resulted in a group of immigrant professionals in the United States who are either unemployed, underemployed, or employed in non-native occupational fields. Among the group of immigrant professionals are overseas-trained teachers who are lawful permanent residents. The United States teacher population does not reflect the ethnically diverse student population and various parts of the country have teacher shortages for specific subjects and groups of students. An overlooked source of teachers has been the pool of overseas-trained teachers who could help alleviate the teacher shortage problem. Immigrant overseas-trained teachers who wish to teach in U.S. K-12 public schools bear the burden of proving knowledge and competence. In addition, credentialing entities have required most of these immigrants to go through a “re-education” process. These requirements together hinder the career mobility of many overseas-trained teachers. To better understand what was known and not known about the research problem, this review of literature focused on two topics: (a) experiences of immigrants whose profession requires licensure or certification on gaining employment; and (b) career commitment.

Gaining Employment: Experiences of Immigrant Professionals

Empirical studies on the employment-process experience of overseas-trained professionals in the United States were scant. Even scarcer were studies about overseas-trained schoolteachers. Therefore, this section included studies on overseas professionals of other licensed professions and consisted of three studies conducted in the United States, ten studies in Canada, and one study in Denmark. The primary category of immigration in the United States at the time of this study was family reunification followed by employment

and both categories required sponsorship. In Canada, the primary immigration category was skilled workers and professionals for economic development (<http://www.cic.gc.ca/>). Canada used a point system to evaluate six qualities of overseas applicants in determining selection to immigrate as independents for permanent residency. The most valuable quality was education followed by language, work experience, age, arranged employment, and adaptability. Although the two nations differed in their immigration policies at the time of this study, many of the findings in the Canadian context were applicable to the United States context with regard to employment experiences of immigrant professionals because both countries received large numbers of immigrants to fill labor market needs and contribute economically. These two multicultural countries were each other's largest trading partners. This section consisted of four areas: (a) overseas-trained schoolteachers; (b) female overseas professionals; (c) conflicted overseas professionals; and (d) employers' views on recruitment and evaluation.

Overseas-Trained Schoolteachers

There were no studies found on the employment-process experience of overseas-trained schoolteachers in the United States despite a search for empirical studies using the ERIC, Education Research Complete, Education Full Text, ProQuest Dissertation & Theses, ProQuest, CSA Sociological Abstracts, SAGE Journals Online, and Google Scholar databases. The key search descriptors used singularly and in various combinations were foreign professionals, immigrant professionals, overseas professionals, foreign-credential teacher, foreign-trained teacher, overseas-trained teacher, immigrant, foreign teacher, overseas teacher, foreign trained, employment, United States, immigrants career choice, career mobility, career development, teaching profession, commitment,

occupational commitment, teacher commitment, and career. The publication date field was open and the search period was September 2008 through November 2009.

In the early 1960s, Canada changed its immigration selection criteria from national origins to education and skills, which opened the door to a new set of immigrants. During the same period, Canada was experiencing a teacher shortage. Using archival documents and narratives from interviews and a focus group, Kelly and Cui (2007) examined the immigration experiences of seven Jamaican teachers who immigrated to Alberta in the 1960s. Two themes that emerged from the data were (a) push and pull factors of immigration, and (b) the process of certification and credentialing.

Political and economic instability in Jamaica pushed Jamaicans to emigrate. Canada's new immigration policy, coupled with advertisements, teacher recruitment in Jamaica, and friends attracted the participants to the country. Many of the participants were unable to show evidence of teaching experience and, in turn, were issued letters of authority that were valid for up to three years. The letter permitted participants into the classroom but at the lowest salary level. The next level up was an interim certificate that was granted after an evaluation of overseas training transcripts. Generally, participants' education and training were devalued, that is, three years of teacher training in Jamaica was only equivalent to one year at the University of Alberta or two years at the University of Calgary. Participants needed to return to school for two or three years to earn an equivalent four-year Canadian bachelor's degree and, ultimately, the teaching credential. Another issue was that each province had different requirements. Unfamiliar with education in other nations, Alberta's credentialing organization required some participants and their colleagues to repeat grade 12. This study provided a foundation for understanding

the complexities of immigration, for both the host and sending countries, and that devaluing prior learning was not a new phenomenon.

Most people can intellectually understand the challenges of being devalued, but the degree of understanding differs by how it was experienced. Beyon, Ilieva, and Dichupa (2004) gave voice to 28 overseas-trained teachers from 12 countries on their experiences of re-credentialing requirements and obtaining employment in British Columbia, Canada. Eighteen of the participants, who had 5–20 years of teaching experience, were required to repeat almost all of their professional and undergraduate education. Several of these participants used the word “zero” to express how the evaluators made them feel about their prior accomplishments. These participants gained permission to immigrate based on their credentials but these credentials were of little value in obtaining authorization to teach in their new country. This resulted in their identity negation.

Two participants successfully appealed the evaluating institute’s decision. Eight of the participants complied and three of the participants planned to comply with British Columbia’s re-credentialing requirements. However, there was no guarantee of future employment. Competition with native-born Canadians was one reason that five participants chose not to pursue teaching in Canada. Other reasons were insecurity with English fluency, time, and cost. Missing from this report was whether the authors assessed the similarities and differences between the participants who were required to repeat some of their tertiary education and those who were required to repeat all of it. The significance of this study was the interrelationship between rigid qualifications, negative reinforcement of professional identities, and employment.

Although educators and policymakers in the United States and Canada expressed the necessity for ethnic minority teachers, the sparse immigrant teacher population in Ontario schools prompted Phillion (2003) to investigate the mismatch between goal and reality. Using narrative inquiry, the researcher explored the knowledge and experiences of five female overseas-credentialed teachers from India, Jamaica, and Somalia who were negotiating the process of re-entering the teaching profession. All the participants had several years of teaching experience and two participants had earned master's degrees from English-speaking institutions in the United States and India. Phillion identified three levels of obstacles: (a) systemic obstacles (for example, translation, time, and cost of the qualifications evaluation, certification in two teaching areas that necessitated additional courses, and local experience); (b) social obstacles (for example, racism and xenophobia inside and outside of schools); and (c) general obstacles (for example, accented English, past experience not valued, and perceived as not serious about employment as teachers because of their minimum wage jobs at the time). Although all the participants complied with the certification requirements and adjusted to the Ontario environment, only one of the five participants obtained employment—a one-year contract as a classroom teacher. One participant returned to her home country. Cost, time, and perceived favoritism toward native Canadians were the reasons other participants stopped pursuing teaching positions.

Female Overseas Professionals: Various Professions

Using a qualitative case study approach, Shih (2005) interviewed eight female professionals from the People's Republic of China in Mandarin about factors that affected their career development in Massachusetts. In addition, Shih investigated the strategies participants used to adjust and further their careers. Participants were asked to recount

their immigration experiences chronologically, which provoked their memories of small events not specified in the interview questions. The participants entered the United States under the nonimmigrant categories of student, cultural exchange visitor, or skilled worker as the primary applicant or a dependent of their husbands. The narrative analysis of the data revealed that the foremost factor that initially hindered career development was the U.S. immigration regulations limiting the right to work legally for these types of visa holders. Other facilitating and hindering factors were language and cultural background, field of specialization and skill transferability, discrimination and prejudice, gender relationships and family responsibility, and U.S. opportunity. Many of the participants used the constraints to develop adaptive strategies, such as: having an open mind to change; seeking ethnic networks; and using community-based services. Therefore, negotiating, adapting, and ultimately embracing the immigration experience was a means of survival and self-development of personal and professional identities.

Oftentimes, women who immigrated as dependents of their husbands delayed seeking employment because of the patriarchal values of their homelands, and thus had more difficulty gaining employment. Wang (2008) explored the perspectives of immigrant women professionals' immigration and employment experiences in Canada. Using a qualitative framework, Wang conducted a series of in-depth interviews in English with six women from China, Kenya, Mexico, and Brazil whose professions were schoolteacher, architectural engineer, university lecturer, university administrator, bank clerk, and civil engineer. One participant immigrated under the family-class category and five participants immigrated under the economic class—one as primary and four as dependent applicants.

All the participants were unemployed or underemployed at the time of the study and their length of residence in Canada ranged from eight months to nine years.

The theme that emerged regarding participants' initial employment choices was "tools of exclusion" (p. 65). Participants were hindered by their accented English, perceived limited English fluency, lack of Canadian experience, economic status, and unfamiliarity with job seeking protocols in Canada. In turn, participants pursued local education to improve language skills and volunteerism to gain local experience. These strategies were the routes to re-certification in their profession or to enter a new occupational field.

The participants' stories revealed the importance and interconnection of their small and large, planned and unplanned life events. Their reasons to emigrate were related to their preparation for immigration that then related to their ease or difficulty with initial employment. Although local education was not a guarantee of employment, it was a part of the immigration process—a means to new learning, new social relationships, and new opportunities for full economic and social integration.

Recognizing migration as a critical life event was the catalyst for Liverage (2009) to investigate how and when highly-skilled immigrant women re-entered the labor market in Denmark. In this qualitative study, Liverage interviewed 15 immigrant women from Eastern European countries asking them to tell their life stories. The participants immigrated during the 1980s and 1990s, and their immigration class was spousal dependent (11), refugee (3), and work migrant (1). The professions of the participants before emigration were mainly in the fields of science, engineering, and law. At the time of the interview, four participants were employed in their original homeland profession,

six were employed in professions different from their homeland, and five had been unemployed for 10 to 16 years.

Analysis of the data showed that local experience required to gain employment was the main obstacle that participants faced in attempting to re-enter their professions. The dilemma was whether to remain in their homeland profession or try something new, which played upon participants' professional identity. If participants decided not to pursue re-entering their homeland profession, an uncertainty developed about who they would become and the thought of "becoming just a housewife" (p. 130) was terrifying. In turn, the participants used three approaches to solving their dilemma. The first approach used participants' ethnic identity as an opportunity in which their assets fit the need of certain employers. For example, fluency in different languages led to jobs as translators and caseworkers helping other immigrants. Some participants were able to elevate their position while others remained in positions well below their original professional status. The second approach began with assessing one's level of commitment to one's homeland profession. This helped participants decide whether to comply with the host country's employment requirements that necessitated committing to re-education. The third approach of one participant was leaving, that is, returning to one's homeland; however, this separated the family. This study illustrated the importance of immigration class and the uncertainties that trailing spouses face not just in terms of work but also their multiple identities.

Persevering Overseas Professionals: Various Professions

The notion of professionalism was a social construct that Salaff and Greve (2003) used to explore why the job statuses of professional immigrants from China dropped after their arrival in Canada. The researchers conducted a series of formal and informal

interviews over a period of two to seven years with 50 couples to learn about individual characteristics, family and work histories, personal networks, and in Canada, experiences seeking employment and the types of jobs obtained. All the participants emigrated to continue building their careers, 64 participants were certified professionals, and the husband was the primary applicant in 46 cases. After migration, only 16 male participants regained their professional status. The researchers quantified the qualitative data and after statistical analysis concluded that job status for overseas professionals was institutionally bound regardless of human capital. That is, many professions requiring certification were closed to overseas-educated and overseas-experienced individuals by professional associations. These professional associations controlled labor markets by mandating certification and licensing requirements. Employers assumed that new immigrants lacked cultural skills and rarely considered them for management positions, especially women. Whereas human capital was generally considered a valuable asset in most societies, Canada's non-recognition of immigrants' overseas experiences contradicted their immigration policy of economic development. The findings were consistent with other studies on causal factors associated with downward occupational mobility.

Oftentimes, individuals who were unable to achieve certain professional goals blamed themselves. Zong (2004) investigated the perception of individual and structural barriers to occupational attainment by surveying 1,180 immigrant professionals from China in six Canadian cities between 1997 and 1999. The majority of the respondents' professions before immigrating consisted of engineers (38%), teachers (25%), and medical doctors (8.7%). In Canada, only 31% of the respondents worked as professionals while 22.4% never worked. Almost half of the respondents (588) had 5–10 years of prior

professional experience but 67% of this group experienced downward mobility, as did 62% of the respondents with more than 10 years of overseas professional experience.

Language and culture were individual qualities that could be barriers for new immigrants. However, even respondents who did not have difficulty with English (54%) or cultural adaptation (61%) experienced downward mobility. Forty-seven percent of the respondents believed that overseas education and work experience was not fairly compared to Canadian standards and 77.5% of the respondents felt that getting their overseas credentials recognized was the primary factor to whether they would practice their profession in Canada. In addition, 77% of the respondents believed that being a “visible minority” placed them at a greater disadvantage. The frustrating situation was that non-recognition of prior professional work experience hindered immigrants’ re-entry into their chosen profession to acquire Canadian experience in which their lack thereof also disqualified them from their professional practice.

Over time, one’s memory of events changed depending on one’s emotional tie to the event being pleasant or unpleasant, the frequency of the retelling, and the collective memories by other people. In Canada, Grant and Nadin (2007) surveyed the emotional perspectives of 180 skilled immigrants from Asia, Africa, and the Middle East who were experiencing credentialing and employment problems at the time of the study. Over 90% of the respondents had a university degree and over 60% of the respondents learned English as a child with more than 40% educated in English. All the respondents were married and had at least one young child. The annual income of one-third of the respondents was less than \$10,000 and another third of the participants earned between \$10,000 and \$20,000 a year. These income levels were below the low-income cut-offs (or

“poverty line”) for a family of three living in a moderate-sized urban community (Statistics Canada, 2008), which implied the need to secure employment quickly.

Analysis of the data showed that the more immigrants experienced downward mobility, the less likely they were to acculturate with their new country. That resulted with a strengthening of their native cultural identity. More than 44% of the respondents indicated that recognition of overseas training and credentials was “impossible or very difficult” and a similar percentage felt the same regarding recognition of overseas work experience. In addition, half of the respondents felt that securing Canadian employment that fully used their skills was “impossible or very difficult.” Consequently, more than 60% of the respondents felt a combination of being disappointed, sad, and bad. Other emotions felt by more than half of the respondents were stressed, hurt, and frustrated. Whereas the immigration priority of Canada was skilled workers, the expectation by immigrants was that their credentials and work experience were assets that Canadian accreditation organizations and employers sought, recognized, and valued. Although, Canada awarded points for overseas education, training, and work experience toward granting immigration, it did not explicitly guarantee employment and more specifically, to practice one’s profession. Thus, the respondents’ emotions were about not knowing “the path to take to overcome the credentialing problems they faced” (p. 159).

In contrast, a qualitative study by Van Ngo and Este (2006) explored the process used to successfully re-establish overseas-trained careers in Canada. The authors conducted a series of in-depth interviews with six immigrant professionals (three females and males each) from six different countries. At their time of arrival in Canada, the participants had 6 to 20 years of practical experience, four of the participants were

licensed in their professions, one participant was a refugee from Romania, and the English fluency of five of the participants was intermediate or advanced.

Van Ngo and Este (2006) categorized the process into three stages: (a) pre-migration preparation, for example, being aware of lack of a social support network and, in turn, initiating communications with relatives and associations; (b) post-migration individual challenges, for example, cultural differences with employer recruitment practices and self-marketing of job applicant; and (c) post-migration structural challenges, for example, requirements of local experience and letters of reference from Canadian employers. Participants felt that the latter requirements created a “vicious circle” (p. 39) and believed that, oftentimes, Canadian institutions did not understand educational systems of other nations and assumed them to be “inferior” (p. 40). The participants were open to change not only to get a job and do well but also because they were proud of their prior learning and experiences. However, facing the challenges also required patience, determination, and strength, since it took 18 months to five years for all six participants to re-enter their professions. Five of the six participants were voluntary immigrants, but the authors did not report why the participants chose to emigrate or what led to their choice of profession and commitment to it. This study suggested that immigrant professionals’ knowledge, experiences, and socioeconomic class were the resources that eased entry into their host country, which contradicted other studies.

Employer Views on Recruitment and Evaluation: Outcomes

While independent organizations evaluated overseas credentials, employers made the hiring decisions. Three studies in this section examined employer selection practices

with immigrant job applicants in the United States and Canada. One study examined occupational outcomes between immigrants and native-born Canadians.

The goal to increase the number of minority teachers in classrooms and the number of English language learners in schools led Vallejo and Garcia (2001) to investigate requirements, recruitment, and the employment process of overseas-trained teachers for public schools. The researchers conducted semi-structured telephone interviews with administrators of state credentialing agencies, human resource directors of school districts, and school principals in six U.S. states with the largest Latino populations. In general, the states did not have fixed policies for employing overseas-trained teachers and there were not any additional methods to assess overseas-trained teachers' credentials beyond the requirements of U.S.-trained teachers.

Principals, "the ultimate decision-maker[s] in hiring...teacher[s]," (p. 35) expressed the need for biliterate educators and were open to overseas-trained teachers. However, they stated that the paperwork was "incredible" (p. 28) and acknowledged that the evaluation process was difficult and expensive for the applicants. Hiring overseas-trained teachers was not a high priority of the respondents, especially if the school district had a collaborative relationship with a local college of education. Yet, hiring overseas-trained teachers on a short-term basis was a common practice. Interestingly, the latter finding implied that requirements and concerns may differ between permanent and short-term overseas-trained teachers. Missing from this study was how the three entities worked toward achieving the goal of increasing the number of minority teachers and their retention.

In a case study on the phenomenon of discrimination through the college recruitment and hiring process for technical positions by a large chemical manufacturing

company, Parlin (1976) compared the experiences of a total of 762 U.S. bachelor's and master's degreed citizens and immigrants in the fields of science, engineering, and mathematics. Eighteen percent (141) of the subjects were immigrants representing 15 countries, with two-thirds from the non-western countries of Asia, Africa, and the Middle East. The cumulative grade point average of the citizens and the immigrants was 2.64 and 2.84, respectively. The data from applications, interviews, and observations measured four indices: (a) the number of invitations for plant visit, (b) the number of accepted plant visits, (c) the number of employment offers, and (d) the number of offers accepted.

The findings demonstrated that immigrants were at a disadvantage early in the recruitment process in that only 15% (21) of those interviewed received invitations for plant visits, whereas 64% (397) of citizens interviewed received invitations. Seventy-five percent of the citizens who visited the plant received job offers. In contrast, 55% (11) of the immigrants who visited the plant received job offers, but only one immigrant was from a non-western country. Parlin did not report any details about what qualities attracted the employer to ultimately offer employment to the 10 immigrants, especially the non-western immigrant. Although this study was conducted more than 30 years ago, its significance was that hiring criteria was highly subjective in spite of objective human capital merits as a path to success instilled by many societies.

Sangster (2001) investigated the issue of overseas credentials assessment by interviewing 25 employers of various occupational sectors and representatives of assessment organizations about their views on assessing and recognizing credentials of immigrant professionals in Ontario, Canada. Analysis of the data found that paper credentials were important in recruitment decisions for occupations that require

certification or licensure; however, some participants felt that certification bodies were too restrictive by giving “far too little credit for foreign training” (p. 14). Evaluation practices varied among the sectors in that some used professional associations, immigration lawyer investigations, or regulatory bodies. The participants’ greatest difficulty was accurately assessing overseas experience and its equivalency with Canadian skills and norms. A few companies used competency-based assessments based on the principles of prior learning assessment and recognition for all prospective employees. There was a consensus among participants that the immigration point system and employment in a certified or licensed profession was misunderstood by immigrants.

Reitz (2003) conducted a multivariate comparative study to examine the relationship between occupational attainment of immigrant and native-born Canadians. The author used logistic regression to analyze census data from 1981-1996 on the variables: immigrant status, gender, race, language, education, and residency. The findings showed a significant relationship between immigrant status and occupational access. Specific analysis of the 1996 data found that immigrant women were more disadvantaged than men ($r = -0.86$ and -0.53 , respectively across all occupations, and $r = -0.44$ and -0.35 , respectively with professional occupations; $p < 0.010$). Blacks, South Asians, and Filipinos experienced greater barriers than European immigrants did.

Increasing post-secondary education was a greater liability on earnings. At three levels of education, that is, some post-secondary education, bachelor’s degree, and graduate degree, immigrant men earned 9%, 37%, and 33%, respectively, less than native-born men. The liability was greater for immigrant women in that they earned 13%, 42%, and 54%, respectively, less than native-born women. A disadvantage for increasingly

educated immigrants grew between the years studied, which made discounting of credentials more difficult to understand. In other words, as the amount of education increased, the amount of earnings decreased. This finding contradicted the belief of most societies whereby increases in education contributed to earnings power. However, Reitz stated, “professions with a stronger social component, such as education or social work...have a strong local component, and it is precisely the transferability from foreign to local that is at issue in the case of immigrants with foreign qualifications” (p. 7). The decisions of employers, evaluators, and prospective employees oscillated between objectivity and subjectivity, familiarity and unfamiliarity, and status quo and change.

Section Summary

These studies unveiled the experience of immigrant professionals of teaching and other professions re-entering their profession in the United States, Canada, and Denmark. Employability of immigrant professions rested upon the social constructs of human capital and social capital defined by professional associations, governmental agencies, educational institutions, evaluation organizations, and employers. The leading reasons that hindered immigrant professionals from practicing their profession was (a) non-recognition or devaluation of prior learning, training, and experience; and (b) lack of local experience. This implied that immigrants, as a whole, were considered inferior. Encumbrances at one level cumulatively affected immigrants at the next level. Survival required looking inward and outward to decide upon adapting, developing, and finding fit. Some of the immigrants persevered using adaptive strategies to re-enter their respective profession or a different profession. Together, these studies illustrated the complexity characteristics of focus in this study and the inextricable connectedness of immigration

admission class, gender, nativity, occupation, employment, professional identity, culture, and personal identity.

Career Commitment

Some immigrant professionals regained their professional occupations but it was an expensive and stressfully long process. Education, training, practice, and professional status were all assets and some reasons that an immigrant decided to pursue her or his profession in the host country. This section reviewed empirical studies on factors that influenced teacher commitment to the teaching profession as a career. These studies represented people from a variety of nations, including the United States.

Attractors and Commitment to the Teaching Profession

In 1963 and 1964, Lortie (1975) conducted two studies on the character, life, and work of schoolteachers. Data from intensive interviews with 94 teachers in the Boston metropolitan area and a survey of all primary and secondary teachers (over 5,800) in Dade County, Florida, revealed five hierarchical attractors to teaching: service, interpersonal relations, continuation of learning, material benefits, and time compatibility. These attractors represented human intrinsic, ancillary, and extrinsic motives. In addition, teachers' responses to their job satisfaction and willingness to choose to be a teacher again were identified as rewards. Over 86% of the Florida teachers felt most satisfied when they knew they "reached" students and that the students had learned. After categorizing the rewards into the three motive groups, Lortie found them to be similar to the intrinsic attractors to teach that thus elicited commitment to the teaching profession.

Two studies situated in Brunei Darussalam by Yong (1995; 1999) illustrated the relationship between attractor and commitment to teaching. In the first study, 133 pre-

service teachers of primary education responded to open-ended questions about their reasons for choosing to become teachers. Yong categorized the responses into three groups: altruistic, intrinsic, and extrinsic motives. The largest percentage of reasons was extrinsic motives (45%), followed by intrinsic (31.6%) and altruistic motives (22.4%). Examples of extrinsic reasons were “no other choice” (implying that almost 14% of the participants were unsuccessful in other professions or gaining higher levels of education and thus, may not like teaching), “influenced by others,” salary, job security, and work hours. Yong (1995) noted,

In Brunei Darussalam, teachers' salaries are comparable with those of many professions of similar qualifications. Teachers are civil service employees and the term of service is permanent.... Teachers normally work half a day 5 days a week and for about 200 days a year. (p. 277)

The main intrinsic reason was having an ambition to become a teacher and the main altruistic reason was “like working with children.”

In the second study, Yong (1999) built upon the first study by investigating commitment and job satisfaction of 311 primary school teachers in urban and rural areas. The experience of the teachers ranged from one to thirty-six years. Participants responded to a questionnaire on whether they would choose teaching as a career again and to provide three reasons for their response. Almost 60% of the participants would choose to become a teacher again and the main reasons cited were “a challenging job,” “enrichment of knowledge” (intrinsic motivators) and having an interest in teaching or ambition to become a teacher early in life (self-fulfillment motivators). In contrast, participants who would not choose to become a teacher again defined “a challenging job” as “too stressful,” “too demanding,” and “too many discipline problems” for the salary they received. Over time, the demands on teachers had increased while salaries had increased at a very slow

pace, if at all. Other reasons were limited promotion prospects, lack of social recognition, and public blame for student failure.

The framework of many empirical studies on attractors and commitment to teaching was a single theory and approximately 70% of the studies were completed before 2000. These facts and the issue of teacher retention led Sinclair (2008) to investigate the effect of initial teacher education on motivation and commitment with Australian student teachers. Using a questionnaire with Likert-type items and open-ended questions, the author surveyed 211 student teachers of primary education at the beginning and end of their first semester of coursework and practicum. Participants were predominately female (89.4%), Australian-born (85.8%), and native English language speakers (87.7%). The theoretical framework was general motivational theory, adult learning, and career theories, as well as teacher education literature.

Analysis of the data showed that motivation to teach was a combination of intrinsic and extrinsic factors. The intrinsic factors were working with children, intellectual stimulation, altruism, authority and leadership, self-evaluation, and personal and professional development. The extrinsic factors referred to the job of teaching in which the motivations were career change, working conditions, life-fit, influence of others, and the nature of teaching work as a creative and social profession. At the end of the semester, almost 24% and 35% of the participants reported no change in motivation and commitment, respectively. Coursework did not affect the commitment and motivation of 25% of the participants, while student-teaching practicum affected the commitment and motivation of almost 33% of the participants “a lot.” Beyond the descriptive statistics, the qualitative data expressed positive and negative reasons for the changes. The practicum

provided participants authentic experiences with which to assess their fit and future with the profession.

As change was constant, social forces of culture, economics, and politics led people to re-examine the meaning and purpose of their lives. In 1997, the British colony of Hong Kong returned to the sovereignty of China and subsequently, a number of events, such as the Asian financial crisis, the outbreak of Severe Acute Respiratory Syndrome, increased unemployment, and the decline of births led to educational reforms that resulted in a teacher retention problem. Choi and Tang (2009) examined the career perspectives of 23 Hong Kong teachers of primary, secondary, and special education on the complex construct of teacher commitment using the qualitative life history method during years 2006 and 2007. Participants were grouped into three cohorts according to the year they began teaching, that is, six early-career teachers (mid-1960s to 1970s), nine mid-career teachers (1980s to 1996), and eight late-career teachers (1997 to 2007). Participants spoke about their “personal lived experiences, career histories, critical career events, professional experiences... teacher commitment” (p. 769) and rated their intensity of commitment (0 the lowest and 10 the highest) and its changes during their career. In addition, personal and career-related documents were examined and a spouse, colleague, or friend was interviewed.

The findings revealed that love for students increased or sustained the commitment of all the participants and passion about their respective subject was a positive factor for one-third of the participants. Unstable work conditions due to downsizing and closing of schools was the major cause of decreased commitment with the early-career participants as it hindered collegial support. All three cohorts expressed frustration with increased

workloads, administrative chores, and meeting the government's expectations of high student performance. Unfair treatment by school leaders and the overall lack of school support disappointed the late-career participants. Other factors that reduced commitment were personal time conflict, health, and age. The authors' findings concurred with the study by Yong (1999).

Section Summary

The literature about career commitment of teachers in four distinct countries provided insight into the attractors to teaching and their similarity with commitment to the teaching profession. The desire to work with young people was the foremost intrinsic attractor to become a teacher in all the studies. Although the culture of teaching emphasized service, geographic location and organizational structures were factors in which salary, job security, and time compatibility were the foremost extrinsic attractors to teaching (Yong, 1995). While teaching was a challenging profession, teacher job satisfaction was highest when students showed their learning. The interpersonal nature of teaching tended to nurture teachers' commitment to the teaching profession. Over time, teachers' degree of commitment to the profession changed with planned and unplanned personal, local, and world events. Factors that reduced commitment were age, health, and work conditions, such as increased work load, administrative tasks, lack of collegial and leadership support, and blame for academic failure of students. The studies presented represented countries with sizable immigrant populations, but the studies implied that the participants were homogenous groups, that is, no distinction of their nativity or gender.

Final Summary

Who one is in the world and what her or his purpose in life is are questions that pertain to identity. Identity is fluid as it is achieved and ascribed at once. The review of literature clearly indicated that personal beliefs, values and traits, workplace conditions, and educational systems were all interacting factors that affected teacher commitment, its sustainability, and its degree of change. Many immigrant professionals had difficulty with re-entering their profession and gaining employment in the host country, especially professions that required licensure or certification. Immigration class, geographic location, time, and organizational bodies were inextricably linked with securing employment. External conditions like an economic recession constrained the job market and internal states like accented English fluency created assumptions by employers about occupational ability and fit within their organizations. The value of immigrants' prior education, training, and overseas work experience by the labor market was considered to be almost zero even though they had more education and experience than the native applicants. This was contrary to the belief of most societies in that higher levels of education led to increased earning power that nurtured being productive members of society.

What was unknown about immigrant overseas-trained schoolteachers in the United States was their past, their lives before emigration. Key unknown factors about this group of immigrants were: their enjoyment interests before becoming teachers, influential people, educational experiences, family and community dynamics, the forces of history, culture, economics, social and political contexts during pivotal career decision-making events, and chance events. Furthermore, little was known about their commitment to the teaching profession.

Studies specifically about the employment of overseas-trained immigrant schoolteachers in the United States did not exist, which called to the need for this study. Prior education, work experiences, and immigrant entry experiences alone oversimplified the immigration process and who immigrants were. Each immigrant had a unique and complex life story that could help employers better understand who she or he was with respect to culture, aspirations, and commitment that documents alone did not tell. Within the stories, were the characteristics, qualities, and skills that school employers could have identified with and desired in their teachers but had yet to learn.

“Every human existence is a life in search of a narrative” (Kearney, 2001, p. 129). The next chapter explains the rationale for conducting a qualitative study. In addition, the methodology for this study describes the criteria and procedure for selecting study participants, the forms of data collection, and the plan for data analysis.

CHAPTER III: METHODOLOGY

Restatement of Research Purpose

The purpose of this study was to investigate immigrant Chinese public K-12 school teachers' perceptions about career attractors, commitment, and mobility. In addition, this study explored the situational factors that led these overseas-born trained or credentialed teachers' decisions to adapt and pursue the re-credentialing process in becoming California public school teachers. The focus of this study was to provide a framework for understanding the interrelationship between life events and career decisions of immigrant teachers before and after their migration to the United States. This chapter describes the qualitative study approach, selection of participants, data collection methods, and data analysis strategies for this study.

Research Design

The design of this study utilized a qualitative life history approach to explore the life of individual careers. The aim of life history research is to get an "intimate familiarity" (Plummer, 2001, p. 37) with life as lived of individuals with respect to the inextricable links of social, political, and historical context, the entity in its complexity to enhance experiential understanding of another. The researcher seeks to know "'why', 'how', 'what's it like' and 'what does it mean to you'" (Goodson & Sikes, 2002, p. 22). Life history research is twofold. The first phase of the research is the telling of lived experiences by a participant from her or his perspective in the form of a "life story." The construct of life story attends to what is said and upholds the individual agency of the participant to negotiate her or his identity and to make meaning of her or his experiences with the social relations of dynamic time and space (Denzin, 1989; Plummer 2001). This method allows

the participant to sequence the story such that she or he reveals more than a question and answer method uncovers. The second phase of the research is identifying, acknowledging, and bridging particularities and the interdependencies of social, cultural, and historical context embedded in the life story by the participant and co-interpreted with the researcher (Denzin, 1989; Goodson & Sikes, 2001). Life history research provides a means to reveal the social relations of power and realities from those who are marginalized, generally unseen or silenced.

Most approaches to career development do not account for multiple contextual factors or specific life events that may bear significance on career decisions (Bloch, 2005; Bright et al., 2005). The qualitative life history approach complements complexity theory as both support the importance of the whole person. Events, feelings, and opinions reveal the multiple interrelated contextual conditions of a particular group of individuals (individually and collectively) that help others understand the foundation of their career aspirations and commitment, expectations of their career mobility, and influences on their career decisions. With respect to the research problem of teacher shortage and the pool of overseas-trained teachers, the findings from a study about a gay teacher, a minority group, utilizing life history research by Newman (2010) led her to assert, “Greater understanding of the range of identities that teachers bring to teaching may ultimately lead to greater retention of teachers as well as the...school workforce desired” (p. 51).

In this study, career decisions were the phenomenon of exploration and the participants’ experiences were the illustrative examples of how personal and structural conditions affected their career decisions, thus requiring rich and deep information. The life history approach illuminated the influences that led participants’ decisions on why

and how they become teachers, what they felt during their process of becoming teachers in their homelands and in the United States, and what their experiences meant to them.

Population and Sample

Criteria for Participant Selection

The research problem, purpose of the study, and research approach suggested particular criteria for the purposeful selection of five study participants. Participants were (a) natives of China, including Hong Kong and Taiwan; who (b) earned their teaching training or credential outside of the United States; (c) immigrated to the United States, (d) became California-credentialed schoolteachers; and (e) taught in public K-12 schools at the time of this study. In addition, the participants were initially limited to women because this study explored the influences of patriarchy—gender role expectations and social positioning of primary versus dependent immigrant status—because it has contributed to employment and wage disparities between men and women (Liverage, 2009; Man, 2004; Purkayastha, 2005; Reitz, 2003; Salaff & Greve, 2003; Shih, 2005; Wang, 2008). Furthermore, since 1930, more than half of the new immigrants each year were women (Vernez, 1999) and in each of the fiscal years of 2005, 2006, 2007, 2008, and 2009, more than 56% of females obtained legal permanent resident status in California (U.S. Department of Homeland Security, 2010a). Yet, most studies about the employment of immigrants in the U.S. labor market focused on males (Purkayastha, 2005; Vernez, 1999). However, after failing to obtain enough participants over a seven-month period and upon the approval of my Dissertation Committee and the University of San Francisco's Institutional Review Board for the Protection of Human Subjects, the criteria were expanded to include: (a) men; (b) recent public schoolteacher retirees, that is, up to 5

years; (c) overseas-trained immigrant teachers in the process of earning their teaching credential in the United States; (d) teachers at independent or religious K-12 schools and community colleges; and (e) immigrants with undergraduate degrees and teaching experience with adults abroad, but were public school teachers at the time of this study.

Research Setting

This study was intrinsically bound by place, that is, emigrants from China to the United States and employed in the San Francisco Bay Area. Nine counties composed the San Francisco Bay Area with San Francisco, San Jose, and Oakland as the three largest metropolitan areas. The U.S. Census Bureau (2010) estimated that in July of 2009 the population was 7.4 million for the combined area. The ethnic composition of the population in 2009 was 45.5% White, 22.7% Hispanic, 21.3% Asian, 6.3% African American, 0.5% Pacific Islander, 0.3% American Indian or Alaska Native, and 3.3% multirace or no response (U.S. Census Bureau, 2011). The Bay Area had over 358 thousand immigrants from China (U.S. Census Bureau, 2011). The San Francisco Bay Area had both a large Chinese student population and teachers who might have met the criteria. For example, the Chinese population of San Francisco Unified School District (2009) in Fall of 2008 was 17.5 thousand students and 410 teachers.

Participant Recruitment

When I began recruiting participants for this study, teachers were busy preparing students for the state standardized tests and implementation of the tests spanned two and a half weeks. Afterwards, teachers were busy with end-of-year school activities. I sought five participants using chain sampling (Patton, 2002). This sampling is a networking method that asked a broad group of people to identify key informants who knew

prospective participants. This method offered a greater chance of finding participants who fit the criteria, had an interest in the study, and would agree to the time demands of the data collection. I used three methods to contact four groups of people in recruiting participants. The contact methods were: (a) telephone, (b) e-mail, and (c) meeting. The groups of people were: (a) personal contacts, (b) directors of organizations that served Chinese populations, (c) department heads and professors of colleges with teacher credential programs, and (d) public school administrators and teachers.

First, I called upon my personal contacts, explained my study, and asked for recommendations of teachers who met the selection criteria and may have had an interest to participate in my study. I received a few recommendations to contact specific school administrators and counselors. Only a few responded and their responses were that the teachers at their schools were U.S.-born or that they were hesitant to approach teachers because they did not know whether their teachers were immigrants or overseas-trained teachers, so it might give a discriminatory impression. One interested teacher did not qualify because she did not meet the criteria for qualification. I asked that teacher for recommendations of other teachers who might meet the selection criteria. My personal contacts led to two teachers, the first and fifth participants, who agreed to participate in the study. The first participant referred me to two teachers. However, it was the second to the last day of the school year. The next day, I spoke to one of the teachers who provided an e-mail address. I sent an invitation to her to participate in the study. (See Appendix A.)

Second, I contacted organizations, such as The Association of Chinese Teachers, Mandarin Institute, Chinese Newcomers Service Center, and Chinese for Affirmative Action, along with churches that served Chinese teachers and private schools with Chinese

language programs for referrals (Appendix B). Summer break started and, so, I did not receive any response during that period. During the second week of the new school year, I contacted the teachers and organizations that had not responded. In addition, I contacted principals of schools with Chinese immersion and bilingual programs. A few people forwarded my information to other teachers while others did not respond. An interim principal of a Chinese language school distributed information about my study to some teachers at his school and a public elementary school. In an e-mail message, he mentioned, “The ‘typical’ Chinese, particularly from overseas, is reluctant to participate in any survey, generally speaking” (W. Chang, personal communication, October 23, 2010).

The research on intercultural communications by Gao and Ting-Toomey (1998) found Chinese people to be reticent with communicating personal information to outsiders. Even with an introduction by a known person, prospective participants were “less likely to initiate interactions with strangers” (p. 16) and may have been uncomfortable with outsiders—me. This proved to be one of the main reasons why potential participants did not respond to the invitations to participate in my research study.

Third, I contacted Department Heads and professors of public and private colleges with teacher credential programs in the San Francisco Bay Area. Respondents stated that they did not know anyone who fit the criteria. Interestingly, one professor stated that in her 14 years at that university, she “never had a student that fits the profile” (K. Tolley, personal communication, September 24, 2010), while another stated that admittance to the teacher credential program was typically to permanent residents who were from another country rather than temporary residents.

Fourth, I tried cold calling by email because I was eager to find participants. I knew that an increasing number of schools had websites. In fact, I designed and maintained the website for a school in my neighborhood. Many school districts were using a collaborative web content information system that included a module for a public website. I started with websites of school districts and followed the links to their schools. I perused school websites looking for faculty lists, academic subject departments, and contact lists. The websites did not provide faculty and staff e-mail addresses, but there was an online form to use to email individual teachers and staff. Once the form was completed, it was e-mailed to the respective faculty or staff member of the school. However, using this e-mail method did not reveal the person's e-mail address. The e-mail message went to the district provided e-mail address. I looked for Chinese last names and noted the respective subjects that she or he taught. If a teacher had a mini-website, I looked at that for possible clues, like pictures. I felt that teachers who used a Chinese or Chinese-western first name, for example, Hing-Ye Mary Chun, might be immigrants. I used the California Commission on Teacher Credentialing website to verify names and credentials held. There was no way for me to be sure if these teachers were immigrants and, even if they were, whether they were teachers in their homelands, but it could lead to referrals. I sent invitations to many teachers using this method.

One prospective participant, who lacked spare time, initially declined to participate. However, she said she might reconsider if I was desperate. That was my window of opportunity. Other than the contents of my e-mail invitation, this teacher knew nothing about me, a stranger. She asked for information about my study and me, which I provided as document attachments in a follow-up e-mail message. Her response was that she did

not have time to read the documents and asked to speak by telephone. That was a Saturday evening. On Monday, I received her call and learned that she had read my material and felt compelled to participate. She also suggested that I contact prospective participants in person and gave me the names of a few teachers at her school. I took her advice and met with five teachers in person. Four did not fit the criteria and one declined for personal reasons. I continued cold-email calling and followed-up with people who had not responded. Another prospective participant interviewed me for two hours before agreeing to participate with the condition that all the interviews would take place during the winter break. In addition to more students, many teachers were responsible for an increasing amount of administrative duties and tasks because of state budget cuts to schools. Therefore, the lack of spare time was another reason that many teachers declined to participate in the study. My cold-email calling method resulted in three participants.

In each case, I asked recommenders to get permission from teachers to release their contact information and their preferred method of contact. Subsequently, I contacted the prospective participants by telephone or e-mail with an invitation to participate in my study. I relayed information about the study, what involvement would entail, participant's rights, confidentiality, and the benefits of participation. (See Appendix A.)

I contacted teachers who agreed to participate in the study and scheduled the first interview with them. I considered these teachers to still be prospective participants until they signed a consent form. I sent a consent cover letter (Appendix C) and an Informed Consent Form (Appendix D) to each prospective participant to review in advance of our first interview. This procedure allowed the participant to review the Consent Form with me before signing it. I asked prospective participants who did not meet the criteria or

declined to participate in the study and participating participants for recommendations of other teachers who might meet the selection criteria.

Study Participants

The group of five Chinese teachers who agreed to the series of interviews for this study consisted of three women and two men. At the time of this study, the age of the participants ranged from mid-40s to mid-50s. The participants were from three public school districts consisting of a unified school district serving students in kindergarten through grade twelve, a union school district serving students in kindergarten through grade eight, and a union school district serving high school students. One participant taught elementary school students. Two participants taught middle school students, and two participants taught high school students. Demographics of the participants and biographical sketches of all the participants are included in Chapter IV.

Ethics

An ethical dilemma in research is the relationship between the researcher and the participant in terms of power and knowledge. The participants were the experts of their lives and I made every effort to uphold their dignity and worth in the following ways.

Before identifying prospective participants, I submitted an application to the University's Institutional Review Board for the Protection of Human Subjects (IRBPHS) stating the background, rationale, participant criteria, procedures for recruitment, informed consent, data collection, and confidentiality, and participant risks and benefits about the study. The Chair of the IRBPHS granted approval of my protocols for this study. (See Appendix E.) When I did not obtain enough participants after seven months of recruitment, my Chair and I discussed ways to expand the criteria for participant qualifications. I

submitted a letter to my Committee stating the reasons for the shortage of participants and asked their permission to expand my criteria for participant qualification with five categories. (See Appendix F.) The Committee granted permission and I proceeded with submitting a modification application to the IRBPHS that described the proposed changes and rationale. The Chair of the IRBPHS approved the modification. (See Appendix G.)

I gave each participant a Research Subjects' Bill of Rights. The protocol that I set for this study protected participants' rights in the following ways:

- (a) Prior to consenting to participate in the study, prospective participants were informed about the nature and objectives of the research being conducted;
- (b) Participants were informed that their participation was voluntary and that they may withdraw from the study at any time without explanation;
- (c) Permission to audio record the interviews was requested and all participants were informed in advance when such recording took place;
- (d) Participants had an opportunity to choose a pseudonym and only pseudonyms were used for all names of people and other identifiable sources, such as schools, in all public verbal and written forms to uphold confidentiality and protect their identities;
- (e) The data collected was stored in locations only known by the researcher, and all electronic documents were encrypted with password protection; and,
- (f) Participants learned that they could request copies of interview transcripts and written reports by the researcher.

Instrumentation

Data collection for this study utilized four types of instruments: (a) a participant fact sheet, (b) an interview guide, (c) a summary of participants' stories, and (d) the researcher.

Participant Fact Sheet

In the first interview, participants provided key facts about their birthplace, family, education, and teaching career in their homelands. In addition, the participants provided information about their immigration to the United States. The information was recorded on a participant fact sheet (Appendix H) that also included the pseudonym of the participant, date, time, and location of the interview.

Interview Guide

An analysis of the data from the first interview provided the foundation for the second interview. An interview guide (Table 3) specified several questions to answer each of the research questions. Using the interview guide, I asked the participants to provide more details about certain events or stories and to answer questions about areas that they did not present. The final interview also utilized the interview guide.

Researcher's Summary of Participants' Stories

I gave each participant a written summary of my interpretation and analysis of her or his life experiences and achievements to review for accuracy before our final interview. The summaries were similar to the biographical sketches reported in Chapter IV.

Researcher as Instrument

The researcher, as interviewer, interpreter, and reporter, was the main instrument for obtaining knowledge. Therefore, her or his integrity was critical to the credibility of the research study (Kvale & Brinkmann, 2009; Sikes, 2010, Smith, 1999). This section describes my background, position, and preparation for conducting this study.

Table 3

Interview Guide

Research Questions	Interview Questions
1. What were the attractors and aspirations of foreign-born credentialed teachers before they became teachers?	<p data-bbox="854 401 1438 478">What was your favorite activity as a child and how did you feel then?</p> <p data-bbox="854 506 1438 583">Was there anyone who you admired? If yes, please tell me about this person.</p>
2. What led to foreign-born credentialed teachers' attractors, perceptions, and expectations of their profession and aspirations for their career before emigration?	<p data-bbox="854 611 1438 688">What were your childhood experiences with schooling?</p> <p data-bbox="854 716 1438 758">What experiences led you to teaching?</p> <p data-bbox="854 785 1438 863">What were your parents' expectations regarding your career?</p>
3. How did personal history, networks, and institutional experiences influence the decision of foreign-born credentialed teachers to pursue the re-credentialing requirements set by the California Commission on Teacher Credentialing?	<p data-bbox="854 894 1438 936">What was the employment process in China?</p> <p data-bbox="854 963 1438 1041">What were your reasons for immigrating to the United States?</p> <p data-bbox="854 1068 1438 1146">What were your perceptions, expectations and aspirations for your career?</p> <p data-bbox="854 1173 1438 1209">How did you feel before and after arrival?</p>
4. What patterns of sensitive dependence did foreign-born credentialed teachers associate with their experiences in seeking teaching positions in California public schools and their commitment to the teaching profession?	<p data-bbox="854 1241 1438 1283">What are your beliefs about education?</p> <p data-bbox="854 1310 1438 1388">What was your experience with securing employment as a teacher?</p> <p data-bbox="854 1415 1438 1482">What do you like most about being a schoolteacher?</p>
5. What were the forms of adaptation and attractors that led foreign-credentialed teachers to emerge as U.S. credentialed teachers?	<p data-bbox="854 1514 1438 1591">What are the differences between China and the United States educational systems?</p> <p data-bbox="854 1619 1438 1696">Did you consider any other profession after immigrating and why or why not?</p>

My interest in the research topic stemmed from my experiences as an American-born child of Chinese immigrants and schooling as an unhappy experience of being alienated by teachers because they were unfamiliar with the culture, learning styles, and needs of students of different ethnicities. After 19 years as a graphic designer and more than 40 years after I began school, I entered the field of education because children of immigrants still had similar school experiences that I had. On the one hand, my reasons for studying Chinese immigrants was because of their historical exclusion to and expulsion from the United States (Pfaelzer, 2007; Takaki, 1998) and still viewed as inferior beings by some people. On the other hand, as a sub-group of Asians, Chinese have then been hailed as model minorities yet disregarded from taking part in many policy issues because aggregate data overshadows their particular challenges and needs. My intent was to dispel myths through the inclusive practice of collaborating with research participants, giving them voice and visibility. My enculturation in Chinese traditions facilitated an “insider” understanding of some of the values and practices participants described. However, I was also an “outsider” as I had never emigrated from my homeland

The struggles, determination, and resistance of my parents and other immigrant families led to my pursuit of equity and social justice for immigrants. I was privileged to enter into graduate studies to learn about the historical and social contexts related to some of the past and present educational issues. The coursework of my doctoral studies was in the areas of multicultural education, organization and leadership theories, and research methods. Relevant courses taken included: Immigration, Refugees and Asylees; Asian Educational Systems; Race, Ethnicity and Cultural Identity; Urban Education; Ethical

Organization; Complexity, Spirituality and Careers; Complexity and Leadership Realities; Complexity and Organizational Creativity; and Participatory Action Research.

I conducted studies using interview, focus group, and observation methods. My master's thesis focused on the importance of family to their children's learning. I conducted a series of in-depth interviews with a total of 10 Chinese and Latino immigrant parents whose children attended San Francisco public schools about the parents' transformative reality. In addition, I observed two families daily for two weeks. The study revealed immigration as an on-going process, the human and social capital of immigrants before their migration, the social forces that resulted in their situations at the time of the study, and how various factors affected family cohesion, which then influenced how immigrant parents supported the educational needs of their children.

In fulfillment of a course on participatory action research, I conducted a small field study about parent involvement to learn how ethnic minority parents experienced and viewed inclusion or exclusion at their children's school. I used direct observation and informal group and individual interview methods to collect data on verbal and non-verbal communications between school personnel and parents, and parents' understanding of the school's expectations of them. The study uncovered differences in role expectations and definitions between parents and schools. The implications for practice correlated with the need to increase the number of minority teachers and teachers for English language learners to support diverse ethnicities and immigrant student populations in U.S. schools. These teachers could be immigrants and therefore contributed to the purpose of this study about overseas-trained immigrant teachers in the United States.

I was a teacher for an after-school collaborative serving public middle-school students for two years teaching graphic design that culminated in anthologies of arts by students. In addition, I volunteered at a local public elementary school helping students with computer usage. At the time of this study, I volunteered in a variety of capacities at my neighborhood public middle school working on issues of communication and supports for immigrant families. These experiences enabled me to understand the culture of schools and the daily lives of teachers.

Lastly, I volunteered consulting services to the Chinese Newcomer Service Center about communication. The time spent with this organization allowed me to learn about the different forms of tacit knowledge that hindered immigrants and the invaluable service this organization provided. I am a Chinese American and my service with this organization and the neighborhood schools established my ties to the community and my intrinsic interest in the participant group for this study.

Data Collection

Immigrants profoundly contribute and influence the well-being of our economy and communities, so it was important to understand how our immigrants thrive—adapt, find “fit”, and integrate in their host society. The key to gaining this knowledge was to have the very people who live the experiences tell their story through dialogue. The data collection method was a series of three face-to-face in-depth interviews with each participant.

The period of data collection was June 2010 through February 2011. I contacted each participant to schedule the first interview at a time and site that was convenient for the participants. I met with three participants at their classrooms and two participants at their homes. The design of this study was to hear the participants’ stories; therefore,

during the first interview, my main role was the active listener, paying attention to what was and was not said, nonverbal expressions, and silences. The attention built intimacy and trust for encouraging the participant to continue with telling her or his story (Goodson & Sikes, 2001; Kvale & Brinkmann, 2009).

Four participants allowed me to audio record all the interviews. One participant agreed to be interviewed but not audio recorded despite assurances of confidentiality. Five participants allowed me to take field notes during each session. The field notes consisted of ideas that emerged and nonverbal communications, such as facial expressions, cadence, and hand gestures, including the aspect of life or event the participant was describing when actions occurred. Field notes included details about the participant's life experiences for the interviews that were not recorded. Each of the first and second interviews lasted approximately 90 minutes. The third follow-up interview lasted 45 to 60 minutes. At the end of each interview, the participant and I scheduled the next interview session. After each interview session, I added reflection notes about the ideas that emerged, personal reactions about my interaction with the participant, the flow and depth of the participant's story, and descriptors for initial data analysis. I made electronic documents of all the audio-recorded interviews by transcribing them verbatim and typing all of the field notes.

Interview One

The first interview began with a review of the Informed Consent Form (Appendix D) with the participant. This review included a discussion about the scope of the study and the focus on participant's career decisions. Next, I asked the participant to answer questions about her or his background and offered her or him to choose a pseudonym.

(See Appendix H: Participant Fact Sheet). Afterwards, the informal narrative interview began with my asking the participant, “Please tell me about your life beginning with where you were born to where you are now in your career.” The participant’s story was a starting point for collaborative learning based on lived experiences—from childhood to the time of the interview that informed her or his point of view about ethnic cultures, values, education, work, and career commitment.

Interview Two

The second interview began with a review of what I learned from the first interview to check for consensus. Then, the participant and I proceeded with a semi-structured interview that asked her or him to elaborate about specific life events, decisions, and perceptions, such as circumstances for emigration, the immigration experience, and career expectations to correlate with the research questions. (See Table 3: Interview Guide.) This flexible style of interviewing provided a relaxing atmosphere for building a personal rapport with each participant about activities and events that led to reconstructing perceptions and expectations about her or his career. The interactive nature of conversation sparked an instance of memory—as the exchange drew out the participant’s senses to details of a time past.

Interview Three

Before the final interview with each participant, I wrote a summary of my interpretation and analysis of her or his life experiences and achievements for accuracy. I sent the summary as an attachment by email to each participant respectively. The third open-ended interview focused on the process of constructing meaning. The interview began with a discussion of my summary to which the participant corrected or clarified my

misunderstandings and added information not previously disclosed. In some instances, participants told a new story and its relation within her or his life. One participant gave me a copy of the summary with written corrections. I took notes about the corrections from two participants. Two participants did not have any changes and stated that the summaries were very detailed. I used the interview guide (Table 3) to identify and ask about information that was unclear or missing. Some participants rephrased some questions for understanding. Some participants responded with new stories. The biographical sketches presented in Chapter IV are the corrected versions of the summaries initially presented to the participants.

Data Analysis

Data sources for this study were participant fact sheets, digital audio recordings with complementary verbatim transcriptions, and field notes from the series of interviews with each participant. Initially, I organized my data by participant. I used complexity theory to guide the analysis in generating categories from patterns of words and phrases. I assigned a color to each category and highlighted the transcriptions accordingly. I performed a preliminary analysis after each interview to identify significant career decision events and their initial conditions in terms of historical and social contexts. I looked for gaps and contradictions to refine my interview protocols for the second and third interviews.

Formal data analysis began after the completion of all interviews. I read and re-read all the data and looked for the source of each participant's perceptions of career interest and mobility that formed her or his expectations and changes within social interactions. I used software in performing three levels of data analysis to identify patterns by participant and then across all participants, as follows:

- (a) First, I searched for aspects of complexity theory that specifically pertained to sensitive dependence, attractors, networks, and emergence;
- (b) Second, I searched for words, phrases, or comments relevant to the categories of family, aspiration, education, and opportunity; and
- (c) Third, I searched for other categories that emerged.

Lastly, I examined the patterns and categories from the three levels of data analysis for theme development to answer the research questions and report other findings and themes that emerged.

Validity and Reliability

An aspect of this study was to draw out authentic accounts of subjective experience from immigrant professionals, specifically schoolteachers, in the United States. The participants of this study were the best resource to meet the goal of the study; thus, they, their perspectives, definitions of situations, and lived experiences were valid in themselves (Plummer, 2001). The participants and the researcher did not know each other when this study began.

The validity of the findings and conclusions lay with the intersubjectivity of the knowledge and understanding of experience that I, as a research instrument, gained from my interactions with the participants (Denzin, 1989; Goodson & Sikes, 2001). Therefore, my background, positionality, selection of research setting, and choice of methodology were discussed with the participants. I provided the participants opportunities to review and discuss my interpretations for accuracy and consensus in representing their lives. These actions provided a level of transparency to the participants and readers. I used an inductive approach to identify patterns in the life stories that matched the predicted

theoretical framework and triangulated data within each participant's and across all of the participants' life stories for consistency (Patton, 2002). In addition, I used thick descriptive language and verbatim accounts in reporting on the participants, context, and the assumptions that were central to the research.

With respect to reliability, I stated the criteria for participant selection and described each of the participants. I provided a detailed accounting of my data collection procedures, explanation of decisions, and process of category and theme development throughout the study to ensure its replicability.

Summary

The goal of this study was to gain insight about the interrelationship between life events and career decisions of overseas-trained immigrant Chinese public school teachers. To ensure an ethical, valid, and reliable study, this chapter described the research design, research setting, criteria for participants, methods for recruitment of participants, the instruments, data collection procedures, and data analysis process used for this study. In addition, this chapter provided initial background information about the study participants. The next chapter reports the findings of the study.

CHAPTER IV: FINDINGS

This study investigated immigrant Chinese public K-12 school teachers' perceptions about career attractors, commitment, and mobility and the situational factors that enabled these overseas-born trained or credentialed teachers to pursue and complete the California credentialing process. This study addressed the following research questions:

1. What were the attractors and aspirations of overseas-born trained or credentialed teachers before they became teachers?
2. What factors led to overseas-born trained or credentialed teachers' attractors, perceptions, and expectations of their profession and aspirations for their career before emigration?
3. How did personal history, networks, and institutional experiences influence the decision of overseas-born trained or credentialed teachers to pursue the re-credentialing requirements set by the California Commission on Teacher Credentialing?
4. What patterns of sensitive dependence did overseas-born trained or credentialed teachers associate with their experiences in seeking teaching positions in California public schools and their commitment to the teaching profession?
5. What were the forms of adaptation and attractors that led overseas trained or credentialed teachers to emerge as U.S. credentialed teachers?

The participants were asked to tell their life stories that constructed the data gathered. Generally, the participants told their life stories in accordance with a linear timeline. An initial finding from their stories—the data—was that each of the stories fell into four general time periods. These four life stages were as follows: (a) birth through early childhood; (b) secondary education to adult; (c) emigrant to immigrant; and (d) teaching career. Further analysis of the data revealed interplaying patterns of the

complexity characteristics of sensitive dependence, attractors, networks, and emergence. These complexity elements were present in each of the life stages but varied for each participant and each theme that emerged was not necessarily spoken by all of the participants. Therefore, the findings are organized by life stage, the complexity elements within each life stage, and themes within the complexity elements that emerged.

The findings of this chapter begin with a report on the demographics of the participants. Following this report is a biographical sketch of each participant from childhood to career status at the time of this study to situate their identities and to give context for understanding the findings. Next, the chapter reports the common themes that arose for each complexity characteristic within each of the four life stages. Following the data from the participants, there is a brief report of methodology findings. Because of the difficulty in securing participants, the inclusion of these findings may be noteworthy to future research. The chapter closes with a brief summary of the findings.

Study Participants: Demographics

The participants immigrated to the United States during the years 1989 to 1994. Three participants emigrated from Hong Kong. One participant emigrated from mainland China, and one participant emigrated from Taiwan. Family reunification was the category of immigration for three participants and foreign student was the category for two participants. Three of the participants' children were also immigrants. San Francisco was the port of entry for all the participants. Four of the participants first resided in the San Francisco Bay Area, while one participant resided in the Central Valley. Table 4 shows the demographics of the participants

Table 4
Demographics of Participants

Participant	Jade	Ruby	Pearl	Ming	Sterling
Sex	Female	Female	Female	Male	Male
Origin	Hong Kong	Hong Kong	Taiwan	East China	Hong Kong
Tertiary Education in Homeland	Teacher Certificate, Major: English as a Second Language (ESL)	BA History & Geography; Diploma of Education; Adv Diploma of Education; MA Edu Admin.	Diploma of Social Work	BA English	Teacher Certificate; BA Music; MPhil Ethnomusicology
Student Levels; Student Types; and Subjects Taught in Homeland	Grades 1–6; General and Special Edu; ESL, Art, Science, Physical Edu	Grades 9–13; General; Geography, History	Pre-K, K, Grade 5; General; Chinese	Grades 9–12; General; English	Grades 7–9; General; Music, Art
Years Taught in Homeland	10	15	8	10	14
Year of U.S. Immigration; Visa Type	1994 Family F3	1989 Family F4	1993 Student F1	1992 Student F1	1991, 1993 Family F3
Planned to Teach in U.S.	No	No	No	No	Yes
U.S. Higher Education and California Teaching Credentials	BA Education; Multiple Subjects; BCLAD Cantonese	MA Edu Admin.; Single and Multiple Subjects; Social Science; BCLAD Cantonese	BA Linguistics, TESOL; MA Edu Tech, TESOL; Single and Multiple Subjects; BCLAD Mandarin	MA Chinese; MEd; Single Subject; BCLAD Chinese	Single and Multiple Subjects; Chinese and Music; BCLAD Cantonese
Student Levels; Student Types; and Subjects Taught in California	Grade 8; Newcomers; ELD, Algebra, Science, Social Studies	Grade 9–12; Newcomers; ELD, U.S. History & Modern World	Grade 4; General; Chinese Immersion: Chinese, Social Studies	Grade 9–12; General; Mandarin	Grade 8; Newcomers and General; Cantonese, ELD, History
Children	2 sons	No response	2 daughters	1 son	Son, daughter

In their homelands, the participants were teachers of Pre-K through high school students and their years of teaching before emigration ranged from 8 years to 15 years. Three participants earned Bachelor of Arts degrees, and two of the three participants earned graduate degrees. In the United States, four of the participants earned their California teaching credentials and Bilingual, Crosscultural, Language and Academic Development (BCLAD) certificates in the 1990s. In addition, two participants earned their bachelor's degrees and three participants earned one or more master's degrees. At the time of this study, three teachers taught subjects that were different from the subjects they taught in their homelands.

Study Participants: Biographical Sketches

Pearl

Born in a small southern Taiwan town, Pearl was the eldest of four children whose parents were animal farmers. Her parents valued education by acknowledging teachers' knowledge that garnered a certain level of authority and thus respect. Although Pearl's parents were not highly educated, their education values dictated that studying was a higher priority for Pearl than farm chores. As a young child, Pearl enjoyed playing school with her siblings and friends. She did not like school but she did well academically until she became enamored with watching television during her middle school years. Subsequently, her high school entrance exam results placed her in the second best, instead of the best, high school in her province. This was such a humiliating experience that her father stopped speaking with her for two months. In turn, she chose to attend a vocational high school and, of the four program majors, she selected the preschool teacher program.

Her vocational high school teacher was the role model that changed Pearl's perspective of life and inspired her to become a teacher. The beliefs, lessons, encouragement, and advice of her former teacher were a constant in Pearl's life. Pearl earned a diploma in social work that evolved from a child development program from a three-year college. She declined a position as a social worker at a public hospital because she felt she was too emotional for people who needed a strong supportive figure. She fell back to her high school certificate, which qualified her to be a preschool teacher. Pearl worked as a preschool and kindergarten teacher for six years in Taipei private schools. Afterwards, she returned to her home city where she worked as a substitute teacher with fifth grade students in public schools for two years. The classes she taught ranged from 20 to 50 students.

While in Taiwan, Pearl's fiancé was studying in the United States and this became her sole reason to emigrate. In 1993, she immigrated as a foreign student and arrived in the central California city where her fiancé resided. She earned a Bachelor of Arts in Linguistics with an emphasis in teaching English to speakers of other languages (TESOL) from a public university and a Master of Arts in Computer Applications for Education with an emphasis in TESOL from an accredited private university of state approved teacher credential programs.

In 1996, she and her husband moved to the San Francisco Bay Area after he received a job offer. Soon thereafter, Pearl began teaching Mandarin at a nearby community college, a position she still held at the time of this study. Her new geographic location presented an opportunity to join a new Chinese language immersion program with a public school district. However, she declined the offer because she wanted to care

for and be with her newborn daughter. Three years later, she changed her mind. She wanted to become a public school teacher and fulfilled the requirements of the local teacher education university and earned her multiple subjects credential, Bilingual, Crosscultural, Language and Academic Development (BCLAD) certificate in Mandarin, and single-subject credential. This was no small feat in that the university did not recognize most of the courses she took in Taiwan and the universities where she earned her bachelor's and master's degrees. When Pearl began the teacher credential program, she had two daughters and the cost of childcare was a financial burden for her family. At the time of this study, Pearl was teaching fourth grade students Chinese and social studies in the Chinese Language Immersion Program at a public elementary school.

When Pearl was young, she learned to think about people and events from different perspectives to understand why people do what they do. She adhered to this practice even with her self-reflection, which was apparent in her career decisions. In considering her career aspirations, she gave up the idea of earning a doctorate degree, for now, and becoming a school administrator. She felt that her English fluency was her weakest asset and did not self-identify with the social requirements of a school administrator. She aspired to be a good teacher and a fair person who contributed to society's well-being. She believed that education was "a transforming experience and it's the best investment you can make."

Ming

Chinese history played a significant role throughout Ming's life. His life began in the capital city of a province on the east coast of mainland China. Ming was the eldest of three sons, each six years apart, born to an army soldier and elementary schoolteacher.

His father only completed the third grade, but after his retirement from the army, he became the director of commercial management for the government. His military service enabled Ming's mother to finish high school and go on to receive teacher training. Although most of the people in China were poor at the time, Ming and his friends created games with found objects such as rocks and wood scraps. Wars and the Cultural Revolution (1966–1976) disrupted schooling. Even so, Ming noted that his high school math teacher taught the complex subject of geometry using a method now known as scaffolding, which facilitated learning. At the high school level, English was a required subject that teachers taught in Chinese. Students learned mainly slogans that promoted China or denounced the United States. This foreign language captivated Ming, and he and a friend continued to study English on their own. After high school, Ming's parents found him a job working on the railroad.

During the Cultural Revolution, Mao Zedong, Chairman of the Communist Party of China, eliminated college entrance examinations. The end of the Cultural Revolution led to the reinstatement of college entrance examinations, which was the objective measure of academic achievement that validated one's educational scholarship. Ming's friend learned about the new examination protocol and encouraged Ming to take the test since it was open to anyone. Ming passed the test and received acceptance to Eastern Teachers University. With the approval and financial support of his parents, (his mother moonlighted as a seamstress), he earned a Bachelor of Arts in English.

Staying within his province, he taught English to high school students in Chinese at a well-respected secondary school. However, his students' grades were not very good and the students could not speak English. In turn, Ming thought that English ought to be

taught in English. During Ming's second year of teaching, he developed a strategy to teach English in English in two three-year modules and presented it as an experimental program to the school principal. Ming led the experiment with two cohorts of 64 students each who were starting their first year of middle school. He continued with these students into the second module when the students entered high school level at the same school. His program was so successful that after his seventh year of teaching, he was recognized as an exemplary teacher and awarded with an opportunity to be a visiting scholar in the United States, a place where he knew no one. His scholarship was at a state university in the San Francisco area and lasted a year and a half. This experience opened his worldview and inspired the idea and desire of graduate studies in the United States.

However, back in China, his school's administrators were neither receptive to his desire for graduate study nor studying abroad, but Ming was patient and continued to teach. He passionately pursued this opportunity and finally, three years later, he was back in the San Francisco area state university but without his wife and 6-year-old son. His plan was to earn a Master of Arts in English and return to China. A friend that he had met during his first time in the United States, who was also an immigrant from China, noted that it was a rare opportunity for a person who did not have any family in the country to immigrate here. Because there was a need for bilingual teachers, his friend suggested that Ming consider staying in the United States to teach Chinese. Taking that advice to heart, Ming transferred to the teacher credential program seeking a teaching credential for Chinese.

After a year of coursework, he learned that his former education and teaching experience, along with passing the California Basic Educational Skills Test (CBEST), qualified him for a credential. Interestingly, the credential he received from the California

Commission on Teacher Credentialing was for English instead of Chinese. In addition to his single-subject credentials for Chinese and English, he earned a BCLAD certificate in Chinese. An interest in understanding the U.S. education system led Ming to earn a Master of Arts in Chinese, a Master of Education, and a Certificate of Eligibility for the Administrative Services Credential. In addition to being a classroom teacher, Ming has served as a high school counselor specifically serving English language learners and their families, a public school district Chinese curriculum specialist, and workshop presenter in the United States and China. At the time of this study, he was teaching Mandarin to high school students and adults at a public high school and community college in the Bay Area. Furthermore, Ming was working toward a doctorate degree in educational leadership.

While English was the key element throughout Ming's life, how he dealt with life and career decisions stemmed from the message in a Russian semiautobiographical novel that he read as a youth. (Relations between China and Russia were good then; thus, Chinese translations of books by Russian authors were readily available.) In the novel, the protagonist was a hero whose life made him regretful for some of his past decisions. Ming's translation of a sentence from the novel was "When you're young you want to do anything or everything that later on when you are old, you won't feel sorry for." Ming took the time to assess his options, reflected on his past experiences, and considered future possibilities before he made decisions. Oftentimes, he chose the more difficult course of action and, in hindsight, felt that those were the right decisions.

Ruby

Admiration of people who travel beyond their borders and fascination with travelers' experiences and different places made geographic location a significant aspect

of who Ruby was. A southern province in mainland China was the home of Ruby's family where her grandfather was a grocer until the Communist Party of China became the ruling political party. The loss of the grocery business and economic dislocation by the government forced the family to start anew in farming. Ruby was the eldest of six children. Her maternal aunt, who lived in Hong Kong, wanted to help Ruby's parents and offered to have Ruby live with her.

When Ruby was 8 years old, she moved to Hong Kong and lived with her aunt. Ruby liked school and felt that her elementary schoolteacher genuinely cared about the students and was steadfast in preparing them for the public examinations. In selecting a school for Ruby, an older cousin stated that the private schools in the area were not very good and suggested a subsidized Catholic school. He applied to the school for Ruby and although Ruby was academically outstanding, her cousin deemed her English skills below average and downgraded her grade by two levels on the application. The Catholic school accepted her but her memories of her experience there were not good. Physically larger than her classmates who were also less mature, Ruby felt that she "stuck out." Fortunately, Ruby's aunt saw to her well-being and provided encouraging emotional support. Ruby rarely visited her family in mainland China because of her young age and later because of the turbulent political climate in her home village.

Low levels of education and finite work experiences limited her parents and aunt from helping Ruby with her schoolwork and giving her career guidance; so she was on her own to get a good education. She believed that the importance of education and respect for educators were innate aspects of her Chinese culture. Her love of learning fueled her perseverance to succeed despite obstacles, such as inexperienced teachers and

the fact that the language of instruction was Chinese for the primary grades but English for the secondary grades. Her score on the public entrance test to secondary school placed her 152 out of 20,000 students in the city, and she was awarded a five-year scholarship to secondary school.

After grade 11, Ruby applied to a teacher training college but did not receive a response before the new school year began. She had passed the public examination to the senior tier of secondary school, so she decided to continue with her schooling. Later, she received acceptance from the teacher college, but Ruby decided to continue with her schooling and graduated. She was one of the academically outstanding students accepted to Premier HK University (PHKU). Ruby earned a Bachelor of Arts in Geography and History, a Diploma of Education from Master University in Hong Kong, and both an Advanced Diploma of Education and Master of Education from PHKU. Graduates of PHKU received priority preference for employment, potentially leading to better future positions. In Hong Kong, Ruby taught high school students geography and history for more than 15 years and was the Department Head of Social Studies for 14 years. Her average class size ranged from 30 to 40 students. Ruby was happy with her career and emigrating was not on her agenda.

However, one-by-one, both sides of Ruby's family immigrated to the United States. Her parents were proud of her accomplishments but yearned for her presence. Family took precedence over career so, in the late 1980s, Ruby decided to reunite with her family in San Francisco—being the last of her family to immigrate. Ruby did not plan to pursue teaching in the United States because she heard that the salaries were low and

unruly students were a major issue. She thought she would try business—a field that was popular at the time, by seeking a Master of Business Administration degree.

In the queue for applications at a local college, Ruby and a woman in front of her began chatting. The woman had just received a teaching position so her paraprofessional position at a public middle school would be open. She suggested that Ruby apply for her position. Attracted to the opportunity, Ruby secured the position. The job allowed her to observe students and the school environment. She desired to teach again, but she would need a California teaching credential. She took the CBEST but then did not know what to do next. She sought help from the teacher whom she assisted as a paraprofessional and received information on the credentialing process and advice on the available options. She pursued and earned her California single and multiple subjects teaching credentials, BCLAD certificate in Cantonese, and a Master of Arts in Educational Administration. Ruby faced a few obstacles in the process of earning her teaching credential and learned that other immigrants had similar and different struggles. The shared stories of frustration motivated her to join a group of immigrant teachers and helped develop a program to help other immigrants navigate the credentialing process, learn tips about the examinations, and manage students. This work provided Ruby a great deal of satisfaction but her increasing work responsibilities led her to end her service with this group.

At the time of this study, Ruby taught newcomer students U.S. history and modern world history at a mid-size urban public high school. While she perceived that the benefits of being a teacher were job security and long vacations, Ruby was committed to the teaching profession because of the satisfaction she gained from helping others—seeing students learn, facilitating newcomers' journeys to becoming mainstream students,

and learning about her former students' progress when they returned to visit. She was most proud of the recognition by the school district as an exemplary teacher and her work as a Mentor Teacher of Social Studies. This recognition allowed her to conduct workshops about her curriculum to other teachers. If Ruby had not moved to Hong Kong, she might not have had the opportunity to go to high school, advance to higher education, and be accepted to a university. Ruby was a passionate traveler and avid reader with a broad worldview for understanding many perspectives, mindful of social justice issues, and incorporated those experiences into her curriculum. Ruby believed that education could help a person to become successful and lead a better life.

Sterling

A flute resting prominently in the center of the room was the curiosity that revealed Sterling's passion for music as it flowed throughout his life. Sterling was born in Hong Kong, and his family's homeland was a coastal city in the Guangdong province of China, west of his birthplace. He was the eldest of four sons whose father was a policeman and mother was a homemaker. Living in the police quarters, Sterling witnessed corruption that resulted from the mismatch between prestige and mid-to-low socioeconomic status of policemen. His parents felt that educational achievement for their children was their goal and responsibility such that they raised them in a traditionally strict manner.

Sterling became afflicted with polio at 3 years of age, but he was as active as most children. His natural curiosity led to his many activities, such as coin and stamp collecting, drawing, model making, and ping pong. Even so, his parents and other adults told him that the disease would limit his options professionally and in marriage. His parents were steadfast that studying academic subjects be his only activity, thus thwarting any

development of his interests in the arts—playing music was forbidden. That was until his family moved to a new territory, which required a four-hour round-trip commute from home to school for Sterling when he was in seventh grade. He moved into a hostel near his all boys Catholic school. His parents provided minimal financial support, so Sterling began to home school elementary level children to earn money for personal spending.

At the hostel, Sterling volunteered to help copy music scores for guitar classes. He observed the music teacher but did not take lessons. Sterling had a keen ear that noticed subtle differences in sound tones and taught himself how to play the guitar. The distance from his parents' watch allowed him to hone his skill with the guitar and he spent his first home school earnings on a guitar. The guitar was a seldom-used instrument for that time and place, so it attracted such interest that people sought him for lessons. He taught guitar as an amateur and received a stipend through a youth center. His talent with music led to meeting girls.

The adults' assertions about Sterling's future affected his self-esteem, but it also prompted him to think seriously about his future. His critical thinking skills enabled him to consider worst-case scenarios for different professions and their respective type of organizations. He considered education to be a field that would be stable and secure. He earned a teaching credential from College of Teacher Education in Hong Kong and taught middle school students art and music. Later, he received acceptance to Master University in Hong Kong, fulfilling his parents' dream, and earned a Bachelor of Arts in Music. In addition, Sterling earned a Master of Philosophy in Ethnomusicology from Master University where his studies and research focused on Cantonese folk songs and opera. He published two books in Chinese on these subjects.

In the early 1980s, a paternal aunt sponsored the immigration of Sterling's parents to the United States. Several years later, his parents became U.S. citizens and they sponsored Sterling and his siblings' immigration to the United States. Sterling initially immigrated to the United States in 1991 but returned to Hong Kong to complete his master's degree. Two years later, he returned to the United States with his wife, 11-year-old son, and 9-year-old daughter to live permanently in the country.

After 14 years of teaching, he could no longer teach without a California teaching credential. Seeking employment in a new field was disconcerting, but he found opportunities and worked for a real estate company and a Chinese media company in both newspaper and radio. His salary and benefits were about one-third of what he earned before emigrating from Hong Kong. Eventually, Sterling sought a California teaching credential. He earned his teaching credential in Cantonese and music. However, he has never used his music credential, believing that a credential in Cantonese would not be as readily subject to budget cuts as the arts. He taught elementary school students for five years and then transitioned to a middle school for one year. Surprisingly to Sterling, his Chinese fluency was superior compared to the U.S.-born Chinese-speaking teachers. His background provided the cultural context for understanding proper language usage to which he became a Content Specialist of Multilingual Programs for the school district. In this position, Sterling developed curriculum and teaching methodology for teachers. After eight years, budget cuts forced Sterling to return to the classroom as a teacher and Coordinator of the English Learners program at the previous middle school.

Both informal and formal teaching came naturally to Sterling. He enjoyed being a classroom teacher, yet he recognized that his work as a Content Specialist had far greater

reach beyond a classroom. He shared his knowledge with a number of teachers, who in turn passed on their knowledge to classrooms of students. Those students imparted their knowledge to many more people, continuing the interdependent flow of knowledge that crisscrossed and wound around in people-to-people learning loops. Sterling was a keen observer of people and culture, and his variety of interests, especially music, placed him in a variety of environments. Coupled with his innate musical intelligence, foresight, and gift of sharing with others, he was able to see both sides of a situation clearly. His self-awareness led him to acknowledge that his parents' strict adherence to academic study was necessary for him to focus and gain his educational foundation. That knowledge qualified him for higher education to which he pursued his passion for the arts. He believed that "given comparable circumstances, every child can learn."

Jade

Being a leader began early for Jade, who was the fourth of six children and her parents' first daughter. She appointed herself the leader for her sisters and, whenever they played school, Jade was the teacher. Jade grew up in Hong Kong and communism led to the loss of everything for her parents and almost their lives, which contributed to their low socioeconomic status. Her parents' experiences led to their goal of sending their children abroad for higher education.

The importance of education was ingrained in Chinese culture, yet Chinese families generally gave greater attention to boys. As a youngster, Jade did not care for school nor did she do well academically in primary school. This resulted in her placement in a substandard secondary school, which began with seventh grade. Jade's parents, especially her father, encouraged her to continue with her schooling. Jade took it upon

herself to find a better school. The first year of middle school was a painful experience for Jade because, suddenly, all of the lessons were taught in English. There was no transition from all Chinese instruction in primary school. Jade persevered with determination.

Consequently, the large population and dearth of universities made university acceptance highly competitive and Jade did not receive acceptance to a university. About that time, her parents planned to immigrate to the United States where her brothers were already studying. A U.S. university accepted Jade, but after the American Consulate denied her a visa, she was no longer eligible to emigrate with her parents. She was forced to stay in Hong Kong and for a year, felt lost for a purpose.

Very concerned about satisfying her parents' expectations, Jade decided to become a teacher and a 3-year teacher training college accepted her because of her multilingual skills. She majored in English as a Second Language. While this type of college was not equivalent to a university, a teaching certificate enabled her to teach primary school students. Jade began her teaching career with first and second grade students at a brand new school. In six years, she taught students of each primary grade level, that is, Grade 1–6. She took maternity leave for the birth of her first son and, during that period, she enrolled in courses to learn to work with special education students. Throughout her tenure, she took courses in different subjects, such as art and science; she became versatile with teaching a variety of subjects. After 10 years, she wanted a break from teaching. She and her husband decided to immigrate to the United States as permanent residents with their 5- and 2-year-old sons. Jade's plan was to take a year off and spend time with her family.

After three months in the United States, Jade obtained a work permit. She took a job with her church as an administrative secretary. In this position, she helped translate

documents, brokered language for community members, and taught in the bible school. She had not thought about formal teaching until she ran into a former classmate from Hong Kong at a local restaurant. The classmate had earned a bachelor's degree in England and became a bilingual teacher in San Francisco. Her friend told Jade that there was a shortage of bilingual teachers. That sparked Jade's imagination of being a teacher once again.

Excited about the possibilities, Jade applied and received acceptance to a local university and also took classes at a community college. At the end of a year, she earned a Bachelor of Arts in Education. She continued on to earn a multiple subjects credential and BCLAD certificate in Cantonese. At the time of this study, Jade taught newcomer students English, algebra, science, and social studies at a public middle school. She held an open class after school for her students, unpaid, as that time allowed students to relax and be more open to asking questions than during the regular school hours.

Jade believed that, since her youth, her interests, such as painting, drawing, piano playing, singing, and swimming, helped develop her skills as a teacher. For her, being a teacher was a calling and her own experiences informed her ability to help her students adapt, grow, and thrive. She was protective of her students and reveled in their accomplishments, especially when they returned to visit her and sought her guidance. Jade's greatest asset was her tenacity in determining the path of her life journey. She told me, "I enjoy life more than you think."

The next section presents the findings of the data from the participants' life stories. While themes emerged from all the stories, some participants did not speak about all the themes. If a participant is not cited, that theme did not emerge in her or his story.

Life Stage I: Birth Through Early Childhood

Sensitive Dependence and Initial Conditions

Who one is in the world begins with the conditions of one's environment and its history that set the stage for one to be open to change. Two themes related to sensitive dependence and initial conditions emerged from the participants' stories about their early years. The themes were: (a) location and time, and (b) culture and education.

Geographic Location and Time

Three of the participants (Jade, Ruby, & Ming) reported that the social force of politics contributed to the low socioeconomic status of their families. Power struggles within the country led to wars and economic reforms in which Ming related, "At that time, China was poor. Everybody was poor....A family with three sons, three mouths to eat that means you're poor. This is a poor family." Ruby and Jade spoke about how the power of the Communist Party affected their families in that they were relocated. Ruby's family lost their grocery business and turned to farming, which was dependent on nature and local economies. Jade, with a heavy heart, spoke about the experiences of her parents.

They almost lost their lives. In jail. Death. That experience...Just...still functioning. Still trying to escape his past experience. It was so terrible. I can understand he lost everything. Starting from nothing. Zero.

During the Cultural Revolution, in mainland China there was no regular school. These situational factors led Ruby's parents to accept her maternal aunt's offer to help the family by having Ruby live with her in Hong Kong. Initially, Ruby seldom returned to visit her family because of her young age. As she became older, political upheaval in her hometown made visiting her family unsafe. Ruby, Jade, and Sterling began school in Hong Kong when the region was a British colony before it was ceded back to China in

1997. As a British dependency, Hong Kong society followed the British system of education and law.

Chinese Culture and Education

One is born into a culture of values, traditions, and worldviews that a bound group of people in a community shared. One of the Chinese beliefs that Ming shared was, “If you don’t suffer when you’re young, you’re going to suffer later on. You have to suffer first, then you have a good time later on.” He added, “The Chinese way is, think about tomorrow what you have now. Save for tomorrow.” Whether one is rich or poor, the participants’ parents believed that the importance of education was a goal and responsibility that parents passed on to each generation. Each participant expressed her or his enculturation of education in different yet similar ways. Ruby stated, “the Chinese importance of education is innate...Chinese respect teachers.”

Both my dad and my mom didn’t have high education but they valued education. And I know that for sure because everything the teacher said is right. Everything that has to do with school is important. It’s not probably just for my family but I’m sure it is so for my family. (Pearl)

Our tradition is that scholarship is better. What your parents’ profession is, maybe they are just a dishwasher or garbage man or whatever; they still wish you to get into college, graduate and get a good job. Not to be a driver or...It is our tradition, kind of thinking. We were brought up in such an environment. My family too...The characteristic of Chinese parents, even though they are illiterate, they have the urge that the kids, encourage their children to get into college. (Sterling)

All of the participants’ parents had low levels of education, which limited their abilities to help their children with specific forms of schoolwork. Parents’ expectations were implicit for all of the participants. Three of the participants spoke about difficulties with early education. Jade was unhappy in her primary school years and made to feel that she was not a high achiever. She recounted,

I start elementary school; I have to stay in the grade. Second grade, I have to stay. That means I don't pass. Then I don't like. My parents started to wonder why I don't go up to third grade. My report card, I remember that it was always red. There was one column that was always red. Because my math was so poor, it was always red. Means, I don't pass, you fail. Why? I felt smart enough. Well in school, it made me feel kind of bad.

Sterling shared his parents' explicit directive:

Because of my polio, my parents and other people always expressed to me, "You cannot do any labor job when you grow up." Study....my parents forced me—I cannot play music. I have talent in singing and playing music but they would not allow me to do so. They said, "In Hong Kong, playing music or drawing, you cannot support yourself." So, they forced me in academics only....What they said, I believed....So, at that time, my self-esteem was very low. What I think is, I must do my best.

The directive countered the natural curiosity of children. Sterling's father was a strict disciplinarian who considered any activity by Sterling that was not related to academics as misbehaving. Punishment was beating, a common practice of the culture and generation.

I was raised in a very strict family. Very traditional. I think you recognize those kinds of stories about Chinese parents—how children were beat up when they were young. I was one of them....Actually, I think this is one of the main differences between the Chinese and other cultures here.

I strongly feel that I was discriminated by my parents. My father's favorite children were the youngest brothers, but I don't hate them. Our relationship is very very good. And my father hates me and my brother. We all beat up by him—not the two youngest ones. For me, maybe because I'm naughty, running around, not doing homework all those things. But in the same case, my younger brothers are not good in studying at all—worse than me—never got beaten up by him. Only me and the other brother, the one who follows me. Actually, he has some kind of learning disability. (Sterling)

Attractors

What one likes or dislikes doing can inspire one's aspirations. Two themes that arose about the activities that the participants engaged in as children were: (a) creative talents, and (b) role models.

Creative talents

Three of the participants (Jade, Ming, & Sterling) were active in sports, such as volleyball, soccer, and ping pong. Ming noted that there were neither formal organized sports nor facilities in his community. Oftentimes, he and his friends played in the streets and constructed toys from found objects, such as rocks and wood scraps. They thought up games and contests using their handmade toys.

Three of the participants (Jade, Ming, & Sterling) enjoyed art activities, such as drawing, painting, singing and playing musical instruments. Jade explained, “When I was young, I’m not very good at speaking, so I draw. I paint... art. It also develops me.” She continued,

In the classroom, a lot of times you do projects. This kind of background—how to develop a project—is quite natural for me. I played the piano. I know music. Singing. When you teach students, everybody sings. Especially important for lower elementary to have everybody sing and memorize those songs. And all these students transfer. All these learning experiences very good for transferring everywhere.

Ming recalled, with fondness, singing to his mother.

I was in middle school. I remember when my mother was having the second brother, my second brother. I remember she was lying in bed with the little baby. I was only 12 years old at that time. I just squeezed over in there and the little baby with my mother. I said, “Mom, I want to sing a song for you.” I just started singing. At that time, there was the Peking opera. There was like eight modern operas playing everyday. But I never sang that at home. But in my own time, I probably just listened and learned. I picked it up. That day, that was the first time I really sang them together, one-by-one. My mother was so happy, “Wow, you can sing so well!” She was so happy. I think that was the first time I really sang in front of anybody. Back then, I didn’t know I loved singing.

Role Models

Two participants stated that they liked to play school when they were young and both always played the role of the teacher. Jade entertained her sisters with make-believe stories. Pearl enjoyed mimicking her teachers and assigning her siblings homework. Ming

did not consciously aspire to be a teacher but he expressed, “I think my mother being a teacher affected whether I become a teacher.”

Ruby loved to read and go on picnics. The outings provided the opportunity for new learning and it was a way to verify information that she read. She admired the lives of people who traveled. “I was interested in what they discovered and that they could travel outside of their original location. I could not see myself doing that so I admired them for taking what I believed was a risk.” The travelers’ stories captivated her interest to know about different places and her favorite subject in school was geography.

Life Stage II: Secondary Education to Adult

Sensitive Dependence

The government of the People’s Republic of China considered China as one autonomous country that included Hong Kong and Taiwan. Yet, different environments, culture, and the social nature of schooling affected the participants’ educational experiences and their decisions about school, aspirations, and jobs. Three themes related to sensitive dependence emerged during the second life stage of the participants. They were as follows: (a) school location and language, (b) culture of education, and (c) culture of gender roles.

School Location and Language

Each participant described the school system that she or he had experienced because it was completely different from the U.S. school system. Jade, Ruby, and Sterling were educated by the Hong Kong educational system, which followed the British system. English was the language of instruction beginning with middle school. There were

national examinations to enter middle school, high school (two years), senior high school (two years), and a national university.

Pearl was educated in Taiwan. Mandarin was the official language of instruction and English was a core subject beginning with middle school. English was taught in Chinese. There were national examinations to enter high school and national universities. Vocational high school was an alternative to attending normal high school and required examinations for acceptance to the school and then to a specific program.

In mainland China, the unstable political climate of the country resulted in irregular schooling with no formal teaching during Ming's secondary school years. The language of instruction was Mandarin and, at the high school level, English was required as the foreign-language subject. English was taught in Chinese and political slogans were the examples used in practice. College entrance examinations were eliminated during the Cultural Revolution, so entrance was based solely on personal recommendations. In 1977, college entrance examinations were reinstated.

In all three locations, the population was large but there were only a few high-quality schools for each level, including universities. The competition for acceptance to the best schools at each phase made the high-stakes examinations more stressful. In the 1970s, there were only two universities in Hong Kong and Sterling recalled that approximately one out of 16 high school graduates received acceptance to a university.

Culture of Education

The foremost difficulties some of the participants had with schooling were the change in the language of instruction and testing that was reported in the biographical

sketches. Jade provided a detailed account of her experience and viewpoint on the timing of learning a new language.

Can you imagine, you're 12-years-old, novels in Chinese—everything in Chinese. All of a sudden, no Chinese except for the Chinese textbooks. You have to learn math in English, economics in English, history in English, science in English. So difficult. I suffered especially in science and math. All those languages, I can't read. I don't fully understand. When I look back to choose another path, I believe it is better to develop your primary language instead of disrupting it all of a sudden... it's more natural to connect with the language of your parents. You connect with your parents and that connects to the whole community. I think that way is better.

Pearl was a high achieving student in primary and middle school. She spoke about her middle school and her voice changed to an assertive tone when she expressed why she thought that school in Taiwan “sucked.” English instruction was problematic in that, “None of my teachers, as far as I can recall, were comfortable using English for instruction. So, we always learned English in Chinese.”

In addition,

There were no fun activities as far as I can remember. In middle school, I wasn't involved in sports, in choir, anything else—only study. Study, study, study. When I go home, my parents would ask me, “Did you study for this. Did you do that?” Classes were ranked by your test scores. Everything the teachers talked about was about tests—high school entrance test. They would take away music class or maybe art class because they needed to do more academic teaching or training or testing whatever. So, PE classes, art classes can be sacrificed if other teachers needed the time. There were always tests. When test results were ready to be announced, teacher read the name and score—name and score. So, everyone knew everyone's score.... I was in all this competitive mode all the time. I was competing with myself. I was competing with my classmates. If someone did better in this one quiz or test, I would hate her or I would not want to talk with her.

In contrast, Ming liked school and excelled in Chinese and math. High school was when Ming began to learn English, which was the only foreign language and a school requirement in China. Captivated with English, Ming was uncertain why he was attracted to the language. He expressed,

. . . for some reason I just fell in love with the language, English language...we learned political slogans but that's still the language. You learn a lot of the terms and so I just got interested.

Although school sessions were irregular, he continued to study and practice English on his own, and with a friend even after completing high school. Ming felt lucky that college entrance examinations were reinstated. Passing the examination also meant that he was accepted to a teacher preparation university where he earned his bachelor's degree in English.

Although Ruby's English skills were considered below average when she transferred to a Hong Kong school, she did not speak about the ease or difficulty of learning English. Learning English began at an early age for Sterling. He recalled, "When we were young, no matter your major is music, geography or whatever, English is basic knowledge. When we were young, from kindergarten we study—we already bilingual in English already."

Culture of Gender Roles

Two of the participants stated that family expectations for males were much greater than for females. Pearl commented about her brother, "My brother pretty much takes care of what my father, my parents, left him. Yeah, the boy, right. There is a given destiny for them." Jade's parents desired higher education abroad for their children, which stemmed from their experiences of personal loss. She said her father was "very determined to send boys, the brightest of our whole family...My brother, the first one, because my parents put a lot of pressure on him. As you know, it was so risky." The risk that Jade mentioned was because her parents had been incarcerated, so the government kept a close watch on their actions. Nevertheless, Jade felt that her siblings were smarter than she was in that:

All the other brothers and sisters, they [parents] have these high expectations. For them, expect. They can set high expectations, more self-confidence starting from when they were young. Oh, you are smart. Boys are smart, especially them. And then the girls, oh you're not that smart. You're okay; you'll get married one day.

In their mind, I know, this kind of discrimination for boys is different than for girls—for the Chinese, especially for the older generation. So, I think, I suffer from that image.

Attractors

While competition to the best schools was high, it also served as a motivator for the participants' life decisions. Four themes related to attractors during the second life stage of the participants emerged. These were: (a) parent expectations, (b) significant people, (c) gender roles of teachers, and (d) aspirations.

Parent Expectations

When Pearl learned that she had not been accepted to the best high school in her province, she took the news in stride. She was surprised by her parents' reaction.

I didn't realize how important that was to my parents. I learned that it was bad because my dad stopped talking to me for about two months. I was so humiliated not by that, I think by that as well—by my father's reaction to the whole thing as well as knowing that my classmates, a lot of them, were going into the best high school, the second highest high school, some others like that. I was in the second best, well according to the score rankings for high school. But not good enough for my father or my teacher just by the way she looked at me. She was very, very disappointed by the whole thing and my test results as well.

Pearl did not wish to be wrapped up in the competition for school any more. Instead of going to high school, she chose to take an exam for entrance to a vocational high school. She received acceptance to a vocational school that prepared students to become preschool teachers but that presented another problem for Pearl. The school was located in the city and students were required to wear a school uniform. Pearl felt that people looked down on her. She assumed that these people thought she was not smart enough to attend a regular high school. Therefore, she tried to hide herself from the public by going to school early in the day and returning home when the day became dark. Eventually, her

parents permitted her to move into housing located near the school. Although she was happy that she did not have to be in competition with her classmates with all the testing, she still felt pressured and uncomfortable.

In accordance with her parents' wishes and following her brothers, Jade applied to a university in the United States. She received acceptance to a U.S. university, but the American Consulate denied her visa application. In addition, she did not get accepted to a university in Hong Kong. Staying in Hong Kong, she decided to try a teaching college.

Its status is much lower. So, they accept me because of the language. It's not equivalent to university graduate. It's like a training. So, three years training to be teacher. Most likely as an elementary school teacher. So only work up to elementary level. Anyway, I take it. I got training—three years. I do all and I pass. In elementary school, I had confidence. No other way out. I think it's better on this path and it's good for me to see that for my parents; I have work. At that time, I was also planning to get married. All these were done. I'm kind of very concerned about satisfying expectations.

Sterling's parents had limited his world to academics only. Yet, when Sterling was living at the youth hostel near his school, his favorite activity was listening to the weekly radio broadcast of folk songs, English folk songs.

That's how I learned those Peter, Paul and Mary, Brothers Four, all those folk songs in this way. Eventually, I found that learning these English folk songs, I learned a lot of vocabulary. That helped my English a lot.

At the hostel, Sterling learned about the guitar. He became fascinated with the instrument, yet he did not take lessons. He shared,

...when I was young, because of dignity, I don't ask, I observe. Somebody who played guitar well, I just sit and watch—imitate. I can copy what he did. I didn't have formal training—both art and music, but I passed the exams to enter the university. I don't know why—maybe lucky!

After Sterling finished high school, he entered college for a two-year teacher-training program. He earned his teaching credential and was then accepted to a Hong Kong university where he majored in music. His parents forbade his playing music when he was

young. Their reaction to his majoring in music was, “They allowed me to do anything. In those days, if a son can get into the university—wow!” Fulfilling his parents’ goal gave him the freedom to pursue his passion.

Significant People

“I didn’t appreciate her until she left,” admitted Pearl about her vocational high school teacher, who taught methodology courses about child development. This teacher taught Pearl to view people’s actions from different perspectives and, in hindsight, she projected her wisdom and spirituality.

The teacher that I had for almost three years; it changed my perspective of life. Inspired me to want to become a teacher. This teacher, Xi Laoshi [pseudonym] devoted herself to her students. I remember after school, I had to recite poems—classic poems, because we were students in her class studying to become a preschool or kindergarten teacher. She believed that the way we talked and since we were in class, we were always with the children. They learned from us. We are Taiwanese but instruction is in Mandarin. She thinks we need to improve our Mandarin pronunciation. One way to do it is to read the poems. She would have us, one-by-one read to her. Another thing...with Xi Laoshi is...she asked us to pay attention to very little, such as, our cleaning job....we had to mop stairs. Our classroom was on the third floor....everyday....instead of using the mop; she wants us to use a small piece of cloth so that we can really clean it well. Not only it’s clean, it shines....I was pissed off. “We’re cleaning right now and in a few minutes people are going to walk up and it’s going to be dirty. Why do we have to do that,” I asked the teacher. I didn’t like her....After she left, we had a different teacher, so very different in comparison—how much effort she had invested in our class was special.

Xi Laoshi immigrated to the United States to study and Pearl communicated with her by letter. Although Pearl’s class had many students, Xi Laoshi knew Pearl.

She encouraged me to just continue to do my best, don’t look down to myself just because I was not in regular high school—preparing for regular colleges. That surprised me because I didn’t know she knew that. She told me that she saw a lot of potential in me...I think her encouragement helped me a lot in making a decision—that I want to do that. I want the opportunity. Eventually, I got into the three-year college that Miss Xi attended. The major that I was interested in was also the major that she had in that college, which was child development. After a few years, we lost contact with each other. When I wanted to come to the States, I

still didn't have any way of getting a hold of her. So, when I came, I brought letters with me—letters from her. And I also had the report cards that she gave us with me. I brought them here. And I brought my high school yearbook with me....She was always in my life. I thought about her a lot and her influences on me and how I do things.

A trip back to her home province and the Internet enabled Pearl to find and reconnect with Xi Laoshi. A few years ago, Pearl and her family visited Xi Laoshi.

Jade admired her parents' resilience after almost losing their lives. She appreciated that her father pushed her to go to middle school in spite of the cultural norm for girls. "I know my dad is smart. Sometimes he always boast about, he always reads paper. He knows what is happening. Anyway, I treasure my educational time." Jade's school experiences made her empathetic to students who were less successful, rather than the bright students. Only one teacher stood out for Jade and that was her science teacher. Instead of traditional lectures, he held classes and conducted experiments outside. Jade's vivid memory of those classes was that it was "very chaotic, but the mixture made it happier." She pointed to containers of materials for her own activity-based science class.

Ming fell in love with the English language, but it was his high school geometry teacher who impressed him. Rather than numbers with algebra, geometry dealt with shapes and the subject was complicated because "it's more like imagination and more or less like more reasoning," but that teacher got people interested.

I realized unconsciously, I just had in my mind, oh, this teacher is really doing a good job in getting us to understanding complicated complex ideas through the step-by-step kind of thing. Now I understand that's called scaffolding. So I was thinking, one day when I'm a teacher, I'm going to do the same thing. Some of the strategies I use in my teaching are from that teacher.

When Ming was working on the railroad, his salary helped his family financially. After Ming passed the college entrance examination and received acceptance to a university, he told his parents that he wanted go to college. They said, "Good. Do it." But, "As a

student, I need to get money from home. . . . I was supposed to be bringing money back home. Instead, I did the opposite.” His parents’ actions showed that they supported his endeavor and he was grateful for their sacrifices.

After Sterling earned his bachelor’s degree, he struggled with what to do next. His professor helped and encouraged him with finding the particular area of music that enthralled him. While the Peking opera was well known, Sterling was curious about the little known Cantonese operas. That set the course for his master’s studies and led to two published books on Cantonese opera and Cantonese folk songs.

Gender Roles of Teachers

All of the participants’ parents had limited knowledge of different professions. Therefore, they had little to no involvement with participants’ career choices. In terms of the teaching profession, some of the participants mentioned that teaching was a female profession. Pearl said, “It’s the best job for a woman, a girl can have.” For Ruby, being embedded in a patriarchal society and all girls Catholic secondary school, she related, “I was not aware of many professions, so I think of teachers being a female profession unconsciously.” Observing and experiencing different expectations between the genders in one’s family and community became a cultural norm such that Jade acknowledged that

...the expectation of teacher in Hong Kong [is] not very high—like regular. I mean it’s a good job but it’s not high paying of most jobs. The traditional way of thinking—girls safe, stable, good... I think I start like that. I don’t want to break that circle. I’m still the traditional way of thinking. I don’t want to step out of this circle. I don’t think I’m capable of [stepping out].

Ming shared that this viewpoint was related to the country’s history of feudalism where women did not have any status. Although there has been progress with equalizing gender roles, some participants believed that women were better suited for working with

young children, such that all the participants recalled that the percentage of female elementary teachers was very high. Pearl conveyed, “Teaching young children requires patience which a lot of men do not have.”

It seems to me, elementary teachers are female because kids are young. They are still learning. They need more caring rather than teaching. And ladies do that better than men. And when they are in high school, from the Chinese philosophy, Chinese culture, I believe that when you are in high school, you are supposed to be responsible for yourself. So the caring part is less important than the learning part. So, in the high school, it's more academic. For some reason, [in] this Chinese society, men have more status. The more important this position is the more you see it is a man....I also kind of take it for granted because I think little kids need more caring. If men were teachers in elementary, they wouldn't do a good job in educating those little kids because men usually are not as good as women in terms of nurturing, caring, more understanding. (Ming)

Aspirations

Jade asserted, “I don't want to continue the boy environment. So, I was determined to not be like them.” She aspired to expand the views of the older generation about gender roles and expectations. In addition, she wished “to see students, very young students, happy. So, I started teaching.”

After many years working as a high school teacher in China, Ming aspired to work in higher education. When Sterling was young, he thought “that my whole life should be children, then teach in the college, then be a regular teacher.” He noted, “If my parents allowed me to develop my interests, I may be a good performer or well-known musician or whatever or artist.” For Sterling, choosing one profession did not cancel out all other professions. Although he considered himself an amateur musician, he also became a teacher of music and art, which fulfilled his and his parents' aspirations. While he was working on his master's degree, he

...dreamed of, at that time, hoped to go to university to teach that subject, music and also the Chinese opera. Do research. My dream is that research is my job. I'm looking at those professors at the university, they are writing papers and do

research, fieldwork and all those things. I want to teach the subject ethnomusicology or Chinese.

Emergence

All the participants became teachers. All of the participants had become multilingual. Jade, Ruby, and Sterling became fluent in English in addition to Cantonese—their native language. The native language for Pearl was Taiwanese. She became fluent in Mandarin and had limited knowledge of English. Ming’s native language was Mandarin and he became fluent in English. Fluency in multiple languages increased their future employment opportunities.

Life Stage III: Emigrant to Immigrant

When one emigrates away from one’s homeland, the emigrant takes her or his multiple identities and experiences to the new country. The emigrant becomes an immigrant as soon as she or he lands in the new country.

Attractors

Three themes related to attractors emerged during the third life stage of the participants. These themes were: (a) family, (b) opportunity, and (c) value of prior experiences. Family and opportunity were the reasons the participants chose to immigrate to the United States. Ming originally planned to return to China and Pearl was uncertain whether she and her husband would return to Taiwan. Value of prior experiences was a theme that interacted with the themes of family and opportunity.

Family

The three participants from Hong Kong immigrated to the United States as lawful permanent residents with family reunification visas. Jade, Ruby, and Sterling’s parents

and siblings were all in the United States. Jade wanted a break from teaching and planned to take a year off to spend time with her family and explore her new environment. Ruby's parents wanted her to join them. She was quite happy in Hong Kong, and she said, "I never thought to immigrate. I was not happy about leaving my job and salary. Still my salary now is lower than if I would have stayed." Pearl's fiancé, an immigrant from Taiwan, was studying in the country, and he was her reason for immigrating.

Opportunity

Pearl and Ming immigrated to the United States as foreign students. Since Pearl did not enter a university in Taiwan, this was an opportunity for her to earn her bachelor's degree. She relayed her excitement from her first day of school, "I was very, very happy. I was jumping, skipping. I was so happy. It's a new start. I was just so ready for the challenges." After her husband finished his studies, he received a job offer in the San Francisco Bay Area. Soon afterwards, they decided to stay in the United States.

Ming's experience as a visiting scholar in the United States prompted the idea of graduate studies abroad. Getting permission to do so from the headmaster of his school in China was frustrating. Ming explained why:

In China, at that time, schools limit or they don't want you to. If you're a high school teacher, the principal does not want you to go back to graduate school, graduate study. It's very different from here. Here, you find a job. You don't like it, you go. Back in China, you don't find a job. You were assigned there by your school. When you graduate from college, your college assigns you to this school and this is work for life. If you don't work well there, you don't have a job at that time. Now, it's different. So, that is the school where I'm supposed to go and work. If my principal doesn't want me to go to graduate school, I could not.

Several of the friends that Ming had made during his time in the United States as a visiting scholar suggested that work opportunities were greater here than in China. After

careful consideration, he believed what his friends told him to be true and decided to stay in the United States.

Value of Prior Experiences

All the participants felt that their years of teaching experience in their homelands were still valuable. When Jade learned that her former colleague was a local school teacher, she was excited by the possibility of earning a bachelor's degree and teaching again. She knew the teaching profession, but also knew it would be different. She looked at the opportunity to build upon her funds of knowledge.

If you have certain experience in an area, it's logical to follow that experience that you started then to start a new job. I'm afraid to start brand new—brand new stuff. I'm quite nervous about it. Once you have 10 years classroom experience in Hong Kong, that is really a teaching experience. Still apply that experience in the United States, although it is different. But a lot of them, the teaching experience can apply to the classroom here. Especially the student population that I work with is more or less the same. If there's a chance, I don't want to waste... I hate to say this about myself, but I am afraid to take risks. The risk is that you need to start something new—you never learned it, studied it. I want to take the risk of going back to college. I can continue with what I already have. (Jade)

In the United States, Sterling's interim jobs only allowed one-week vacations a year and his salary was one third of what he earned in Hong Kong. This inspired him to earn his local teaching credential. Low salary was one of the reasons why Ruby did not plan to resume teaching in the United States. She set out to try business and, by chance, she met a stranger who was a paraprofessional about to leave her position. Learning that Ruby was a teacher, the paraprofessional suggested that Ruby apply for her position. A sense of familiarity and longing to teach arose in Ruby. She seized the opportunity as a “stepping stone” in her career to teaching again.

On the recommendation of a friend, Ming decided to teach Mandarin in the United States, so entering a teacher preparation program made sense. It was “After a year, I realized, oh, my credential in China could actually qualify me to do a credential here.”

Sensitive Dependence

Visiting and living in a new place are two different experiences. One’s prior experiences help or hinder one’s fit with her or his new environment. Three themes related to sensitive dependence emerged during the third life stage of the participants becoming immigrants. These were: (a) culture and language, (b) career interruption, and (c) tertiary education in the United States.

Culture and Language

Three of the participants (Pearl, Ming, & Sterling) had visited the United States before they immigrated and that provided them with a sense of the ethnic diversity of the population and culture. Ruby had traveled to five countries before immigrating to the United States, so the ethnically diverse population did not affect her. However, she felt that the Chinese had low status. What was most difficult for her was learning social skills because expressing oneself in the United States was different from China. Her experience with understanding the justification of teacher salary levels in California led her to articulate that

It’s not easy. Asians don’t talk a lot and do not boast about oneself. I wrote an article for the California Bilingual Education Annual Report. The issue was regarding accreditation. Salary is divided into three levels: (a) basic, (b) additional 30 units, and (c) additional 60 units of coursework. It’s black and white—nothing in between... That makes one seem lower than the full extent of her or his education and experiences. So, I learned that I needed to be vocal and show off.

Generally, Chinese people do not talk a lot in social settings where the other people are not family members or close friends. Differences in language and culture led to misinterpretation and Ruby added, “Jokes do not have the same interpretation.”

Ming was a visiting scholar to the United States, which was his first venture from his homeland. He thought he was prepared to receive a new culture, but “Actually, I didn’t know it was diverse. I only prepared for the White society.” He was more shocked with his English.

I was shocked when people didn’t understand me. I was shocked when I didn’t understand people because I thought I learned English. I learned English and I was the one to do the experimental teaching to teach English in English. I thought I was the one to promote teaching English in English. People who learned English should be able to speak the language. I was the one to promote it. I am the one who could not understand a thing. That was really a shock.

But, I understood that I didn’t understand people at that time because of the accent. Even in China, if you go from north China to south China, to another province, even if they are speaking Mandarin, you still have problems understanding them. So that’s kind of understandable, but it’s more than I thought....I just didn’t make the connection with the sound of the word....I have the necessary basic vocabulary. I’m saying just basic vocabulary because in China, what we learned was book language....Read so many novels. We read Shakespeare. We read the modern novels, but they are all in writing. They are not everyday things.

So suddenly when people talked, the first time I got kind of interested. When I say thank you, whatever they do, you thank them. They say, “sure.” That surprised me....I never learned to respond “sure” when somebody thanked me. What I learned, they say, “thank you,” and you say, “you’re welcome.” Or, even more British, “Don’t mention it.”...“You’re welcome,” to me, sounds okay because you are welcome, right. Sounds like the Chinese saying, “bo kou chi” like don’t need to thank me. That’s similar. But when they say “sure” that really surprised me because what does “sure” mean. Sure means of course. Of course, he is thanking me. That’s the kind of sense I got, but I believed that’s not.

The impending return of Hong Kong to China prompted Sterling’s parents to immigrate to the United States in the early 1980s. Afterwards, Sterling and his siblings visited their parents each year. Hong Kong was the site of business and commerce in

which English was the language of business and education. Sterling's experience after he immigrated permanently in 1993 was similar to what Ming described.

We speak in English so often in Hong Kong. I went to an English church, an Anglican church all sorts of Caucasians. We communicate well, but when I came here, what are they talking about when I watch TV? I don't understand. So many things I don't understand. After maybe two or three years, I gradually got it. American English is quite different from British English. (Sterling)

Career Interruption

During the 1990s, the three requirements for earning a California teaching credential were (a) a bachelor's degree, (b) teacher training, and (c) passing the California Basic Educational Skills Test (CBEST). Three participants (Ruby, Sterling, & Ming) had bachelor's degrees and teacher training. Only Sterling planned to teach after immigrating to the United States. Yet, he did not have a teaching credential. Ming, as a non-immigrant, planned to return to teaching in China. His decision to teach in the United States led him to seek immigration. None of the participants considered teaching at private schools.

After 14 years of teaching, seeking employment was disconcerting for Sterling. He worked as a secretary for a real estate firm for a brief period, as a translator for a Chinese newspaper, and as a radio announcer for a Chinese media company. Since Jade was on a break from teaching, she did not think about teaching at all and was content with her position as an administrative secretary at a church. Ruby was planning to enter the field of business. Pearl became interested in linguistics and thought that if she were to return to Taiwan, she could teach English there.

Tertiary Education in the United States

The teaching certificate that Jade earned in Hong Kong was not equivalent to a university degree. When the possibility of teaching in the United States arose, Jade saw an

opportunity to earn her bachelor's degree. She sought admittance to a local state university that required an evaluation of her transcripts and an entrance examination, the Test of English as a Foreign Language (TOEFL). She passed the test and the university accepted her. To Jade, passing the TOEFL meant that her English was "pretty good" and the "evaluation didn't say I had to start way back...I started to think, that's a sign. I take that step. That is a risk. I quit my job to study." She found her first two classes so difficult that she cried and said "I almost think I made a wrong decision....It really scared me." She persevered and when classes were not available, she found transferable classes at a community college. Her husband's sole income was a hardship on her family. Therefore, Jade completed 52 units and earned her bachelor's degree in one year. Afterwards, she passed the reading and math sections of the CBEST. The writing section of the test drew out Jade's determination and she disclosed, "I didn't pass the writing part until after three trials." Thereafter, she worked on earning her teaching credential. She found the coursework helpful, especially for working in an environment with people of different cultural backgrounds. Her teacher training in Hong Kong was recognized, as well as her 10 years of teaching experience; therefore, student teaching was waived. During her summers, she took college courses in the subjects she taught.

Intending to stay in the United States, Ming worked toward a multiple subjects teaching credential for a year at a local state university. In preparing to submit documents to the California Commission on Teacher Credentialing, the university program advisor recognized that Ming's education and 10 years of teaching experience qualified him for a teaching credential on the contingency of passing the CBEST. At that point, Ming quit the credential program and began studying for the CBEST. The reading section of the test

challenged him as he shared, “I passed the writing and the math in the first time. First attempt, I didn’t pass the reading. So, I had to take the reading test several times.” In hindsight, Ming felt that the year of study in the credential program helped him to understand the American education system. Yet, in practice, he admitted, “It took me years, at least two or three years, to understand the real difference between systems that I had to adjust my teaching.” Ming continued with graduate studies and earned a master’s degree in Chinese and a Master of Education. At the time of this study, Ming was working on a doctorate of education at a private college.

Pearl was accepted to a state university as an undergraduate foreign student. Her major was child development, but during her first semester, she recalled:

When I was studying English, studying the textbook, I realized that I was more interested in language than in the content. So, the second semester, I switched my major to linguistics. I think that was a practical choice, as well. If we go back to Taiwan, I can probably teach [English or other subjects] in all English, which would be in good demand.

She knew that, “I can only do preschools if I don’t get my credential.” She earned her bachelor’s degree in linguistics. She sought a master of education degree at an accredited private university. Although she was in the computer education program, she applied the learning to linguistics for teaching English to speakers of other languages and earned her master’s degree. Several years later, Pearl and her husband resided in a different community with a large Chinese population, and she received an opportunity to teach in a public elementary school. She sought a teaching credential program at the local university and only two courses from her U.S. undergraduate and graduate studies were deemed equivalent. Initially surprised, Pearl surmised “that they have their requirements because they want a certain outcome from their students exiting the program. They want students to know this and that. They are trained in certain areas or fields. I respect that.” It took

Pearl a year and a half to complete the 50 required course units. Pearl noted that cultural diversity was emphasized throughout the coursework, which was an area that she never heard of as a teacher in Taiwan.

Ruby received a long list of courses to take after the evaluation of her transcripts. She said it was “practically my entire B.A. work.” She learned that an alternative was to take the National Teacher Examination. She borrowed workbooks, studied and passed the exam, so she had to take only 15 units of coursework to earn her teaching credential. In her opinion, “The coursework was not difficult and not as demanding as Hong Kong. Hong Kong has a lot of assignments and lectures are intensive. Here, there is more group discussion.” Sterling had to take only five courses. Both Ruby and Sterling’s 15 and 14 years, respectively, of teaching in Hong Kong were recognized, so student teaching was waived for both of them. Ruby’s desire to understand the U.S. education system led her to graduate studies at the local state university where she earned a master’s degree in educational administration.

After six years as a teacher in the United States, Sterling considered pursuing a doctoral degree, which stemmed from his aspiration to research and teach ethnomusicology. He described what happened with his initial pursuit:

I went to Berkeley and tried to apply for ethnomusicology. The Department Head notes, “Oh, you are from Hong Kong. So, you have to take the TOEFL test, English test to see whether your English is proficient.” I say, “What! I’m teaching English here and I have to take TOEFL?” Ak! “Oh, because your degree is from the foreign country. That’s why you have to take the TOEFL. Test your English. Ah, I gave up.

Networks

The relationships that people develop with one another may be categorized as strong, weak, and absent ties (Granovetter, 1973, 1983). Strong ties are family and close

friends. Weak ties are acquaintances that one seldom sees and may know through other people. Absent ties are with people who one does not share information but may know that each other exists, such as a person who lives in the neighborhood or the clerk at the local market. These ties provide different types of information. Three themes related to networks emerged during the third life stage of the participants. These were: (a) family, (b) colleagues and strangers, and (c) participants as outsiders.

Family

The strong ties of family provided emotional support no matter where the participants were in the world. When Ming immigrated to the United States as a visiting scholar and then as a foreign student, his wife and son stayed in China. His family was not included in the scholarship; therefore, Ming viewed his first visit as a business trip. Initially, Ming planned to return to China after completing his master's degree and thus, did not wish to uproot his family. He shared his view of the situation:

It's okay. Well, when you miss the family. You call, write a letter, and keep busy most of the time. Also, you're busy most of the time...doing what you're doing...you don't really think about anything else. But at the time, when it's a holiday, it's time when you slow down, that's the time when you feel bad. You miss them.

The only person that Pearl knew when she immigrated was her fiancé. She interacted with her fiancé's friends who majored in the fields of computer science and business. That small network coupled with her weak English skills and undecided stay in the United States led her to question her major in child development. Her fiancé supported her endeavors as she shared: "He said, 'Just do whatever you like is fine.' That just calms me down. To do what I wanted to do. To study what I'm interested in."

Financial cost was the incentive for Jade to earn her bachelor's degree in one year. She stated, "With my kids, it's not as easy. That is a very critical time. I have two mouths to feed." Jade had the support of her husband's income. He, and her parents and siblings, helped with their children.

Colleagues and Strangers

The weak ties of colleagues and acquaintances inspired two of the participants to consider or reconsider their decision to teach in California. A former classmate from Hong Kong bumped into Jade in a restaurant unaware of each other's immigration. An acquaintance that Ming met when he was a visiting scholar reconnected with him. The absent ties of strangers inspired two other participants to reconsider their decision to teach. A community member found Pearl. A stranger standing in line at a local university struck up a conversation with Ruby. The biographical sketches, at the beginning of this chapter, described the events that led these participants in their decision to teach again or teach in California.

Participants as Outsiders

After deciding to earn a California teaching credential, the next step was finding what the requirements were, the process, and the procedures. Two of the participants (Ruby & Sterling) were required to complete a few courses to earn their California credential, but other aspects of the process were not as simple. In fact, when the subject of getting re-credentialed was brought up, Sterling's facial expression became weary and he cried, "That's a painful experience. Nobody helped me, so I had to search like blind." Ruby had a similar experience after she passed the CBEST. She did not know what to do afterwards. She contacted the California Commission on Teacher Credentialing and later

learned that the information she received was incorrect. It was after a year of coursework before Ming learned that he did not need the credential program to be re-credentialed. He said, “Before that, nobody asked me, what’s your background? ...tell me. Nobody did that.” Interestingly, Ming had requested to transfer from the Humanities Department that he was originally accept for his graduate studies to the Education Department, which was granted without any questions. That is, nobody asked him why he was requesting the transfer or assessed whether he met the qualifications for the credential program since he was a foreign student—a nonimmigrant.

The outcome of Pearl’s transcript evaluation made her wonder, “Even though the requirements are different, but why is it? I remember thinking, why does it have to be within this small box.” Sterling asserted,

The problem is that the credential department here just focuses on the qualifications or the need here. They won’t adjust or adapt anything for people coming from other countries. What are their strengths and what are the differences in order to line up and match?

The ongoing shortage of teachers for English learners, science, math, and special education, coupled with the recruitment of nonimmigrant temporary teachers, left Sterling dismayed. “It seems that they do nothing to recruit, help those overseas teachers. How to adjust or how to get again, a local credential. Know nothing about it. It seems to me that their target is those new graduates from here.”

All the participants expressed a number of important misconceptions that people in the United States have about overseas-trained Asian teachers. The most cited misconception by all of the participants was that these teachers only used a traditional teaching method. Sterling commented on the generalization of the claim:

I think they presume that we teachers from Asia those stereotype. Maybe to a certain extent they are true. Even now, some people still think that we used only

lecturing and not enough chances for all those kind of American [teaching] techniques. Because that's what we were brought up ourselves. Our teachers taught us, then we teach our kids—a little bit natural. Also, in China, with such a large population, have these huge classes. That's the way they're going to get all that information or else they'll never get kids through the grade levels. Even now, there may be 50 something kids a class. In Hong Kong, when we teach 40 something kids, natural. Normal.

The misconception reminded Jade of her science teacher in middle school in Hong Kong.

“I still remember that everybody go outside and then watch the experiment. I still remember that till now.”

The second most cited misconception by four participants was that the teaching style was teacher-centered. Student population size continued to be a reason and there was a protocol for students to communicate with teachers as Ming provided:

Class time is the teacher's talking time. You can't say anything. They [students] just listen. It's lecture time. The teacher planned the time. I was a teacher for 10 years, I did that myself. Because, as I said, each teacher only teaches two classes, so many students, there's no way to do any activity. So, teacher's class time is to tell you what I have to say. Students do take notes. Any question is after class. Make an appointment. Go to the teacher's office. Teachers don't stay in the classroom.

Ming also noted that the style was changing or had changed. “I think they're changing but because I've been away for so long, I'm not sure what the changes are but they are trying to follow the model of the American way of teaching.” Pearl shared the opinion of her U.S. community college students:

I received comments from students—college students—they say much of my teaching style is pretty Americanized. Not like traditional Chinese style, which would be a lot of lectures.

Whereas student population was a major reason for traditional teaching method and teacher-centered style, Sterling emphasized the benefits of the method and style:

One of the big differences between the two education systems was that we could use almost 90% of the time for instruction—not disciplining students to keep quiet, to sit still or whatever. Don't have to do that in Hong Kong. That means

they're more efficient because they don't have to waste time on classroom management.

The third cited misconception by four of the participants was that the teachers fostered only rote memorization. Pearl disputed this claim and explained that one goal of the Taiwan education system was for students to have a "very good foundation in math or basic subjects." She admitted to having "a lot of drills and extra exercises" for math in secondary school, yet she drew upon that training many years later. Pearl recounted:

When I was preparing for the CBEST, I didn't have to prepare for math even though I didn't touch math for 20 years. I didn't teach math. I didn't do anything relating to math. But when I was looking at the learning materials that I needed for preparing, it was very easy. I was struggling more with English writing than math. It just took me a while to learn the terms and I passed it first time. A lot of people that I know who are teaching, math is always something they don't worry about and these are people who usually study language, history and art not math at all.

A fourth cited misconception by three participants was that Chinese teachers assigned too much homework. Although education was rigorous, the amount of time students spent on schoolwork varied and were of their own volition. A fifth cited misconception by two participants was that overseas-trained teachers from China lacked teaching skills. In contrast to the latter, many overseas-teachers had teaching skills, but some of those skills were different from U.S. teaching skills. For example, some of the Asian countries use an explicit teaching style while the United States uses an implicit teaching style. The participants thought that the misconceptions might be reasons for favoring native-born teachers. Ming concluded,

An American principal would like to have an American teacher that knows American culture that knows students. If I go to a position where it's a mass situation...I know they're going to hire the other person because I'm a foreigner. I believe number 1, it's the language issue. The other one, I just feel it's local.

Emergence

Two participants became multilingual. Pearl was fluent in Taiwanese, Mandarin, and English. Sterling was fluent in Cantonese, Mandarin, and English. The Asian languages are tone-based and Sterling added that Cantonese was more difficult to learn because there were nine tones, whereas Mandarin had four tones. “You change the tone, you change the meaning.” He also noted that Chinese characters and figures are pictograms, which required one to use both sides of the brain in order to learn the language. He theorized that developing both sides of the brain strengthens the versatile skills needed for not only teaching multiple subjects but in negotiating life as well.

All the participants adapted to the requirements and became California public school teachers. Ming and Pearl applied for work permits sponsored by their local public school districts. Both adjusted their visa status to H-1B, years later to permanent resident, and finally became naturalized citizens. Ming believed that “after I decided to do the teaching here, I feel like this is my home.” Pearl declared, “I love it here and I’m born to live in such a society, not necessarily this society but this type of society because I hate injustice.” The other three participants also became naturalized citizens.

Life Stage IV: Teaching Career

Attractors

In the preceding sections, the findings presented the conditions and attractors that led the participants to become teachers. At the time of this study, the combined years of teaching in their homeland and the United States, for each of the participants, ranged from 12 to 35 years. Three themes related to attractors emerged about the participants’ teaching

careers and their commitment to the teaching profession. These were: (a) calling, (b) benefits, and (c) aspirations.

Calling

The participants rationalized why they chose to teach, especially after their immigration to the United States. Two participants used the term “calling.” Both Jade and Sterling began teaching when they were young. Jade worked for her church tutoring students about the bible when she was in middle school. She also volunteered tutoring young children individually, which helped develop her teaching skills and lesson planning. She had 10 years of teaching experience before she immigrated to the United States. That experience was valuable to her and when teaching in the United States became a possibility, she admitted,

I don't want to waste. I want to continue with what I already have—build up. I think I'm stuck with a calling. Some kind of a calling—urgent area to carry on your mission. I think that if it is God calling me to do a certain thing, it's a place for you. It is obvious it is open...calling. Hey, I'm this person. It's very obvious I should teach. So, I don't want to reject my head, teaching. That is a sign.

Sterling shared that teaching was natural for him. When he was in middle school, he home-schooled elementary school students in whatever subject they needed help. In high school, he taught his classmates guitar and folk songs. He did not know why he liked to teach, but he disclosed, “I like to teach what I know to others.” He had a flair for several forms of creative art and he verbalized his thoughts on his gifts:

I have a theory as to why I'm talented. I believe that somebody up there gave me my talent. Just like, for example, a rich man gives you a big sum of money. Do you want to use it by yourself or do you want to share it with others? It's up to you. So, I think there's someone up there that gave me a lot of talent, so I'm willing to share my talent to others.

Benefits of Being a Teacher

In this study, the participants taught K-12 students. Jade claimed, “That’s the customer who comes in. You need to serve your customer. There’s a customer, there’s a need. Supply and need.” Sterling noted, “I really like children” and Ming shared that being among students made him feel young. Enjoying students was expressed in other ways, such as “watching students learn” (Ruby & Ming), “seeing their growth” (Jade, Ming, Pearl, & Sterling), and they “come back to visit me” (Jade, Ruby, & Ming) that made the participants feel good about their work. Ruby and Jade worked with newcomer students and Ruby liked “helping newcomers move to mainstream.”

An example of these expressions unfolded after school on a Friday afternoon when I arrived at Jade’s classroom for our second interview session. I heard many voices and assumed that class was running overtime. I waited in the hallway and heard chatter in Chinese and laughter. I peeked in and after Jade acknowledged my presence, she told the students that she had a meeting. As the students left the room, their animated conversations with Jade continued about friends and weekend plans. These were Jade’s former students who attended a nearby high school. They had come to visit and one student, with a concerned look, was carrying a thick book. It was a biology textbook and the student was worried about the daunting task of reading every page. Jade was going to help him with a few tips on how to approach the material. She noted, “I look at how successful they are in adjusting to the system. Still worth it. Still worth my effort. It’s a bonus and there is a lot of satisfaction. How can I change? It fulfills all my meanings.”

Ruby and Pearl expressed that being respected as a teacher was a profound honor. Pearl shared that after she came to the United States, one of her fifth grade students in

Taiwan started an ongoing email exchange with her. That former student shared stories about her schooling, boyfriend, and work. Pearl had become her mentor much like Xi Laoshi was a mentor to her.

Recognition of one's specific work was another honor that Ming and Ruby shared. When Ming was teaching in China, his students were not excelling in English and he developed and implemented an experimental program that was a success. He was recognized for his work and awarded an opportunity to be a visiting scholar in the United States for 18 months. The administrators of Ruby's school district identified her as an exemplary teacher. The reward was that she became a Mentor Teacher of Social Studies who helped new teachers and conducted workshops related to her curriculum. The position was for three years and she was selected again for an additional three-year period. Ruby applied and received a subsidy for this work.

Ming felt that he "missed so many years of learning" because school was irregular during the Cultural Revolution. He felt that in teaching students, he also learned from them and he used those learnings to build his knowledge. Job security was a benefit expressed by four of the participants (Jade, Ruby, Ming, & Sterling), long vacations was a benefit for two participants (Ruby & Pearl). All the participants relished the satisfaction of helping others as their contribution to society. Ming articulated that "It's a sense of feeling successful. My students are learning. That kind of achievement makes you feel as no other profession can give you."

Aspirations

Pearl was also concerned about satisfying expectations. As a parent herself, the well-being of her daughters became her priority in creating new goals. As her children

graduated from elementary school to middle school, Pearl wished to move with them. She hoped to earn a teaching position at the middle school where both of her daughters would be attending. In 2010, she translated a sixth grade social studies textbook into Chinese and was contracted to translate the seventh grade textbook. She aspired to improve her knowledge of social studies for her teaching and become an authority of translating words related to social studies.

In the United States, Ming earned two master's degrees and an administrative credential. During his time working as a curriculum specialist for the school district, he thought that experience and his teaching experience would qualify him for administrative positions. He shared, "I did apply to many positions, assistant principal, coordinator of whatever. I applied so many and I stopped. I stopped even trying because you just knew the result." That experience and his position as a high school teacher at the time of this study was the reason that Ming reasoned, "Right now, I just feel like I got stuck in here. There is no way to go a little higher." Ming's reflection led him back to his former goal. He stated,

So, I decided to go to a different path. I want to go more academic than administrative. So, with my doctoral education, I might have a different channel to go to a university to teach full-time. Not that I don't like high school; it's like I want to do better. I wanted to do more. I want to influence more people. At a university level, I can either teach the teachers or I can... Well, it's a totally different—whole different—world.

Another aspect of Ming's goal was that as an immigrant, he wanted to take the opportunity "to do something that is good. That is useful through our hand, even though we're new in this country, we can do something."

Sensitive Dependence

Becoming re-credentialed was one part of the participants' immigrant experience. The next part was gaining employment as full-time teachers. Three themes related to sensitive dependence during the fourth life stage of the participants emerged. These were (a) employer need, (b) employer power, and (c) funds of knowledge about education systems.

Employer Need

Pearl was offered a position before she completed all the requirements to earn her teaching credential. The school she would work at needed teachers for their new Mandarin immersion program. She was offered a position with an emergency teaching credential and earned credit for student teaching in her first class. Sterling easily received his first teaching position at an elementary school in a dangerous neighborhood that needed his bilingual skills. Ruby received a job offer at a high school, but at that time, there was some negative press about the school, so she took a position at another school. Later she learned that her position was only for six months. Before that position ended, the school whose offer she declined requested her. She took the position and was still teaching there at the time of this study.

When Jade and Ming sought teaching positions, no positions were available. This was surprising because they had been told that the need for bilingual teachers was high. Ming inquired about teaching positions at the local public school district before he passed the CBEST. He communicated, "Before I really got any position, one human resources person kind of promised me—saying 'you're a bilingual person, we need you but you must pass the CBEST. I have a position waiting for you.'" He returned to the school

district after he passed the test and the human resources person who made the promise was no longer working there. “I was surprised that nobody was there to take care of me because I had been told, ‘We need you, we need you, we need you.’” The Director of Human Resources added Ming to the school district’s pool of substitute teachers. He was a substitute teacher for a year before he received his first teaching position. Jade had also worked as a substitute teacher for about a year.

Employer Power

One school that declined Jade’s application was a Chinese immersion school. She thought her background would be a good fit for such a school and did not know why she did not get the position.

It’s a secret.... I never know the reason. Then later on, I feel quite bad for a few months. I know that there is an opening. Obvious. I think it was obvious. That time you have an interview and the principal decides whether to accept you.

She noted, “The principal has the power to hire.” Jade alluded to learning that some principals only wanted teachers born in the United States.

My background is very Hong Kong background. I didn’t grow up here. Some of the immersion [schools], they like, want classroom teachers from here who have bilingual skills. It’s not only one school. There is another school like that.

A friend at her church, who was also a teacher, invited Jade to submit her resume to her school. The principal invited Jade for an interview and she recounted what transpired.

I remember that it’s an African American principal. I told my story—similar to the story I’m telling you. That I’m a newcomer, worked all my way in China—from Hong Kong. He was quite impressed, the principal, because African Americans understand what it’s like to be at the bottom in this society in that you’re not recognized... I’m not from a well-off family. My parents were refugees. And he understands that struggle, and I think that impressed him. With the support from the teacher that wants me on her team—wants me to work at the school—to work together and ...our faith...students’ time. So, she highly recommended me to the school. I passed. I was hired.

Ming also experienced the power that Jade spoke about with a new superintendent. At that time, Ming was on special assignment as a resource teacher developing Chinese curriculum for the school district. Financial constraints led the superintendent to devote as much money as possible to classroom teaching. That meant that Ming was to stop working on curriculum even though he was the only person developing a Chinese curriculum. He did not mind returning to classroom teaching, but he was concerned because teachers needed the work he was developing. He spoke with the superintendent and she responded, “Don’t worry about it. Go back.” That dismissal led to Ming’s decision to leave the school district. In the process of seeking a position in another school district, the assistant superintendent offered him an assistant principal position. Ming did not hold an administrative credential and stated, “I regret, I didn’t do my credential right away after I got my teaching credential.” He secured a new teaching position in a matter of days.

Funds of Knowledge: Education Systems

The participants in this study had experience with two different education systems, that is, receiving instruction as students and giving instruction as teachers. Although the education systems have changed over the years in China and the United States, most of the participants felt that the United States was leaning towards the Asian education system with more testing while China was gravitating toward the student-centered style of the United States. The participants thought that a mix of both systems might be more beneficial.

In China, Ming was assigned to his teaching position. In Taiwan, Pearl applied to a school district. Although she listed her preference of schools, the school district placed her in a school based on her examination score. In Hong Kong, Jade, Ruby, and Sterling applied to individual schools. Upon invitation, each then interviewed with the respective

school principal. In Hong Kong, most of the subsidized schools were operated by religious orders. Employment opportunities and promotions were greater for a teacher with no religious affiliation. Generally, these schools preferred teachers of the same religion or no affiliation rather than teachers of a different affiliation. The participants shared that the main difference between employment in California and employment in Hong Kong, Taiwan, and mainland China, was where seeking employment began.

Ming and Sterling nurtured their learning loops through summer courses each year in China. Ming took courses on teaching methodology and kept abreast of new tools and materials for Chinese language instruction. Sterling took courses on Chinese culture and language, teacher training, and curriculum development.

Emergence

Four of the participants (Jade, Ruby, Sterling, & Ming) were single subject teachers in their homelands. They could teach other subjects if they received training in the subjects they wished to teach. Two participants (Ruby & Sterling) taught two subjects and one participant (Jade) taught four subjects. Teachers of preschool and kindergarten (Pearl) were trained in child development. The class size for three of the participants (Jade, Ruby, & Sterling) ranged from 30 to 40 students. Pearl's preschool and kindergarten classes in Taipei ranged from 20 to 30 students, while her fifth grade class in her home province was more than 50 students. Ming had two classes with 64 students in each class. The participants' years of teaching ranged from 8 to 15 years before they immigrated to the United States.

In the United States, all the participants became bilingual cross-cultural teachers. The English only mandate in schools led Jade to doubt the value of being bilingual. She

said, “I’m bilingual. Not sure if that’s good or bad.” Sterling’s first teaching position was as a multiple subjects teacher of fifth grade students. He expressed,

Here, in self-contained class, one teacher must teach math, music, art, everything in elementary school. I was in an elementary school here. A teacher could be so versatile. How talented are they. I’m talented in music and art. So, they send the other class students to my class to learn music together and sing together with me when I was in Hong Kong. Now, in Hong Kong, in all subjects, we have a government required public test. You have to show your results, what you teach according to the curriculum, schedule, or scheme.

But here, elementary school, no. Never any public exam until standardized test fourth grade writing and something like that. So, it is a very open class and within a day, you don’t have a set timetable. Maybe you can have 40 minutes reading and then 30 minutes science. You can adjust your time here. So, if you are not interested in history, you teach less of the study. You’re not interested in music, so maybe your class may not have music for a whole year. That’s a problem, I think. But as a teacher, for me, I’m versatile. I can teach so many things. That’s fine. I don’t think other teachers would—unfair to them, or they could do it but not do it well. How about if they cannot sing? They cannot play piano? How can they teach? Or, they cannot draw well? They cannot expect a teacher to be multi-talented.

Two participants, Ming and Sterling, taught a different subject than the ones they taught in their homelands. One participant, Jade, taught an additional subject than the ones she taught in her homeland. Jade believed that her strength was working with students from overseas. Drawn from her own schooling, she said, “I really kind of have this empathy for them [students].”

Two of the participants exchanged their knowledge about Chinese and teaching methodology with educational and community organizations. Sterling was a member of the testing committee for the Council of Chief State School Officers, conducted research for local universities, founded the Chinese Language Bridge Cup Contest for primary and secondary students, and consulted for a charter school. Ming was a board member of an association for Chinese language schools, an instructor for two foreign-language institutes

of local universities, a committee member of the Chinese language subject test for the College Board, and one of the authors for a series of textbooks.

Fulfilling parents' expectations, participants sensed their parents' pride of them. "They were quite proud of me," said Jade. "I think they are proud of me, especially my status now," remarked Sterling. They were all scholars of a culturally revered profession. In addition, Sterling shared, "I have a good relationship with my dad now. Those things he cannot treat me like that now. Memory. It won't affect me anymore because I forgive."

Methodology Findings

Each of the elements that composed this research study was considered with respect to the researcher's knowledge at the time. Preparation included anticipating issues that might arise yet research is a complex adaptive process with intricacies and unpredictable events. This section reports the findings on recruitment of Chinese immigrant participants.

Networks

Recruiting participants began with my friends who were educators or worked in or with education related organizations. Only one educator led directly to a participant. A professor referred me to a school district administrator who in turn contacted an assistant school principal who then directed me to a participant. While friends referred me to other educators, I was not able to secure any other participants through my social network of strong and weak ties. I secured three participants in absence of any social tie.

Sensitive Dependence

The initial conditions when recruitment began were: (a) academic period, and (b) economic recession at the state and local level. In the San Francisco Bay Area, schools

began conducting state standardized tests in mid-April. Administrators of each school decided their testing dates and oftentimes, testing was spread across two to three weeks. End-of-school year activities followed and culminated with the promotion of students. Teachers were not available during summer break. While the state of the economy fluctuated, the economic recession during the time of this study resulted in larger cuts to the California education budget. In turn, school districts laid off teachers, administrators, and staff to mitigate their district shortfalls. Thus, teachers became responsible for more administrative tasks as well as meeting new and more curricula standards and accountability policies. The changes encroach upon free time such that one prospective teacher wrote, “Each day, I am running for my life” (Anonymous, personal communication, November 18, 2010).

Attractors

The lack of time and the cultural reticence to communicate with unknown people (Gao & Ting-Toomy, 1998) were repellers for prospective participants. Yet, these two factors were common of the participants in this study. Two themes related to attractors emerged about the participants’ who agreed to participate in this study. They were: (a) opportunity of inclusion, and (b) helping others.

Opportunity of Inclusion

All of the participants identified with the research topic of immigrant professionals and the purpose to illuminate others about their experiences. After reading my invitation to participate in this study, Ming said his first thought was, “This is me.” Jade had participated in a previous study about teachers of newcomer students. She believed that this study could further understanding of her and her students that lead to further

strategies that help this group. Pearl appreciated being included in the study as an expert and opportunity to share her career evolution. Sterling's interest stemmed from his experiences with becoming a teacher in California and that the findings from this study would be beneficial to educational policy makers and administrators.

Helping Others

I was clear in stating that my need to conduct this study was to produce a doctoral dissertation. All the participants expressed their desire to help me. After Ruby reviewed my background materials, she responded that "your work supports immigrants, so I will help you." Thus, her participation would help this immigrant group of which she was a member. Ming recognized that he would be seeking participants for his doctoral dissertation. He decided to participate in support of other doctoral students.

Summary

This chapter examined the data collected through a series of interviews with overseas-trained immigrant Chinese public school teachers in California. The findings presented each participant in a biographical sketch. The data analysis was organized around four life stages and the complexity elements found within each of the stages.

The environment of each participant resulted in different experiences for the participants, especially education. During the participants' young years, they engaged in artistic activities such as drawing, playing musical instruments, and constructing toys. Their creative thinking skills continued to be factors in their teaching career. The participants high value of education stemmed from the historical cultural view established by generations of Chinese. The participants' parents desire for their children to be well educated became the participants' attractor to scholarship. Frequent encounters with

women teachers, especially primary school teachers, stimulated participants' perception of gender roles for the teaching profession. Educational outcomes of school entrance examinations, fulfillment of parent expectations, and admiration of former teachers and travelers attracted the participants to become teachers.

The value of prior education, work, migration experiences, colleagues, and strangers influenced participants' decisions to pursue re-credentialing of their teaching credentials in California. Participants learned that employer need contributed to relaxing requirements. The power to hire was held by one person, the principal of the school. The participants were attracted to opportunities that they did not think were possible. The possibility to teach in the United States gave the participants hope and a sense of future fit with their host country. They then became open to the requirements and demands necessary to continue their original career profession. All the participants exhibited intrinsic, extrinsic, and altruistic reasons for teaching and they emerged with new funds of knowledge.

The next chapter pulls together the interpretation of the data presented in this chapter and relates it to the theoretical foundation and the literature reviewed at the beginning of this study. In addition, the next chapter presents implications for practice and recommendations for future research.

CHAPTER V: DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

This study was about the career decisions of overseas-born trained or credentialed teachers who became public school teachers in the United States. The participants told stories about events, experiences, and opinions in which contextual conditions related to their perspectives about their career attractors, commitment to the teaching profession, and career mobility. This chapter provides an overview of the study and a discussion of the findings presented in Chapter IV in relation to the research questions, previous research, and complexity theory. Finally, this chapter presents implications for practice and future research.

Overview of the Study

The purpose of this study was to investigate immigrant Chinese public K-12 school teachers' perceptions about career attractors, commitment, and mobility. In addition, this study explored the situational factors that led these overseas-trained or credentialed teachers' decisions to adapt and pursue the re-credentialing process in becoming California public school teachers. The focus of this study was to provide a framework for understanding the interrelationship between life events and career decisions of immigrant teachers before and after their migration to the United States.

The theoretical foundation of this study was complexity science. Perpetual change among all living systems in the universe and their interdependencies was the rationale for using complexity theory to study similarities in seemingly different phenomenon. The nested relationships of people and events in a person's whole life assisted with understanding the emergence of participants in this study.

The methodology of this study utilized a qualitative life history approach. Life history was constructed by a collaboration of the participants, who told their life stories, and the researcher to increase understanding of immigrant overseas-trained teachers' re-entry into their profession in the United States. The open-ended method of the life history interview centered on the participant's perspective of her or his whole life. This method respected participants' sense of place, the way they lived, communicated, and interacted with entities that shaped their behavior and decisions. In this study, as the participants' life stories unfolded, details of events and experiences emerged that provided entry points related to the research questions. The researcher co-interpreted the contextual factors of social, cultural, historical, and political forces in the stories to understand the emergence of the participants and their careers. The data was collected from a series of three interviews, one unstructured and two semi-structured, with each participant.

The participants consisted of three women and two men from Hong Kong, Taiwan, and mainland China. The participants were single-subject teachers of primary and secondary school students in their homelands. Before emigrating, their years of teaching ranged from 8 to 15 years. The participants immigrated to the United States in the 1990s. At the time of this study, two participants were multiple-subjects teachers and three participants were single-subject teachers. The participants represented three school districts in the San Francisco Bay Area. Analysis of the life stories of the participants revealed patterns of experiences relevant to the research questions, which were:

1. What were the attractors and aspirations of overseas-born trained or credentialed teachers before they became teachers?

2. What factors led to overseas-born trained or credentialed teachers' attractors, perceptions, and expectations of their profession and aspirations for their career before emigration?
3. How did personal history, networks, and institutional experiences influence the decision of overseas-born trained or credentialed teachers to pursue the re-credentialing requirements set by the California Commission on Teacher Credentialing?
4. What patterns of sensitive dependence did overseas-born trained or credentialed teachers associate with their experiences in seeking teaching positions in California public schools and their commitment to the teaching profession?
5. What were the forms of adaptation and attractors that led overseas trained or credentialed teachers to emerge as U.S. credentialed teachers?

Discussion

This section begins with a summary of the findings in relation to the research questions that together formed a dynamic whole. Following this summary is a discussion of the findings in relation to previous research. The final section presents the findings in relation to complexity theory.

Findings and the Research Questions

The context of the participants' geographical and cultural environments stimulated their creative thinking skills and inborn talents. Distressing experiences or inconceivable futures nurtured participants' imagination that attracted them to visual, literary, and performing arts. The inherent respect bestowed upon teachers was an attribute that some participants desired, which led to their role play as teachers in playing school as a favorite pastime. The history and culture of the participants' families was the desire for the next generation to have greater opportunities, especially education. The participants were

embedded in their parents' educational goals, responsibilities, and expectations of them that contributed to their sense of self and identity.

Three of the participants (Jade, Pearl, & Sterling) did not like school, but all of the participants faced education constraints. The participants took responsibility for their education and persevered with decisions and actions, such as securing acceptance to a middle school (Jade), self study (Ming), and rejecting normal high school (Pearl), that exemplified their individual agency. Secondary teachers, as role models, and the positive and negative experiences of good and poor teaching informed the participants' perceptions of the teaching profession. The awareness encouraged their attractors to become schoolteachers. Three participants (Jade, Pearl, & Sterling) aspired to share their interests and knowledge with others and they taught children and youth as volunteers before they became primary and secondary school teachers. Two participants (Ming & Sterling) aspired to be professors of higher education.

Family networks attracted four of the participants (Jade, Ruby, Sterling, & Pearl) to immigrate to the United States. Chance meetings with former colleagues, acquaintances, and strangers, each with their own network, aroused the interest of four participants (Jade, Ruby, Pearl, & Ming) to consider becoming local public school teachers. The participants expanded their networks with these key people and the communication exchange led participants to reflect on their prior experiences. Attracted by the opportunity to teach again, the participants concluded that their prior experiences were valuable and transferable, yet recognized that teaching in the United States would be different. Aspiring to build on their careers, the participants decided to pursue local teaching credentials.

Acknowledging that the teacher training in their homelands was not equivalent to university degrees, the possibility of earning U.S. bachelor degrees was the attraction that enabled two participants (Jade & Pearl) to be open and adapt to the requirements of their respective local universities. One participant (Pearl) drew upon her childhood learning to view actions and events from different perspectives. That is, after the local university accepted only two courses from her U.S. higher education for the teaching credential program, she surmised that her previous coursework was not equivalent to the outcome that university sought. Two participants (Ruby & Sterling) learned about and chose examinations as an alternative to coursework, which sped up their credential process. All the participants felt that the coursework required was helpful because the populations and education systems between their homelands and the United States were completely different. However, each of the participants also conveyed similar feelings that re-credentialing requirements were rigid. That is, there was no assessment of their strengths and how to transition to a different educational system. Student teaching was waived for the participants who had 10 to 15 years of teaching experience in their homelands. Although the participants were happy with the waiver, transitioning to the different education system and U.S. students in addition to learning tacit protocols of each school took longer.

The need for bilingual teachers was high in the 1990s when four of the participants sought teaching positions. Two participants (Ruby & Sterling) received offers of employment easily because of their bilingual skills. Surprisingly, no positions were available for two participants (Jade & Ming). In turn, these two participants became substitute teachers for approximately one year. The participants said the substitute position allowed them to work in several types of schools throughout the district. The experience

helped one participant (Jade) determine her fit with the type of students and schools that would welcome her qualities and utilize her skills. One participant (Jade) experienced and two other participants (Ming & Sterling) expressed that some schools favored hiring native-born teachers and particularly troublesome with teaching positions for Chinese language and culture and Chinese newcomer students.

Two participants (Sterling & Ming) had been on special assignment, at different times, developing curricula for Chinese language and culture. Although they were the only people developing this type of curricula, the superintendents relieved them of those duties because of changes in budgets and the needs of the school districts. In both cases, no one would be filling those positions, meaning no one would be developing curricula for Chinese. In spite of difficulties, the participants drew upon their prior school experiences and empathized with their students. They loved learning and loved sharing their knowledge. They were all passionate about teaching, their students, and contributing to the well being and growth of children and youth. The participants felt that their work was instrumental to their students becoming productive and caring members of society that was worthwhile and the reason for their commitment to the teaching profession.

Acculturation, an aspect of the immigration, is a process of continuous negotiation of finding fit and acceptance. In the process of becoming, each participant confronted a variety of struggles and each drew upon her and his strengths of self-reflection, independent and outcome-oriented thinking skills, and perseverance to overcome institutional and employer power. Immersion in the local environment, and ungraduate studies for Jade and Pearl, helped all the participants adapt to American English, learn how the U.S. education system differed from the education system of their homelands, and accept the California

teacher credentialing requirements. Their enhanced English and Chinese language fluency provided them more opportunities to work in other positions within and outside their school districts.

After assessing California's infrastructure and school district needs, two participants (Sterling & Ming) decided to teach subjects that differed from those they taught in their homelands. One participant (Sterling) who taught art and music in his homeland, became responsible for teaching language arts, math, science, and social studies in his first position as a fifth grade elementary school teacher. The participants were attracted to the smaller class sizes, which afforded them a new level of autonomy in lesson planning. On the one hand, the participants felt that emigrating away from their homelands was a risk. On the other hand, the participants felt that they had to be adaptable in their process of becoming immigrants. Returning to their profession as teachers was the attractor of the familiar and the unfamiliar that led them to emerge as California credentialed teachers.

Findings and Previous Research

The activities that participants engaged in during their formative years established their early attraction to teaching. This fact and their interest in working with children and youth were the intrinsic attractors that influenced participants' choice to become teachers. Extrinsic factors of education, job security, and vacation time also influenced the profession that the participants chose. These findings corresponded to the literature on attractors and commitment to the teaching profession (Choi & Tang, 2009; Lortie, 1975; Sinclair, 2008; Yong, 1995, 1999). Specifically, there was a strong relationship between the intrinsic factors of working with children and youth and evidence of their learning and teachers' commitment to teaching.

The participants (Jade, Ruby, & Sterling) who immigrated under the family reunification category did not submit information about their education, language, and work experience to secure visas. These participants sought employment soon after their arrival in the United States. Although the participants (Pearl & Ming) who immigrated as foreign students were restricted from working, their priority was gaining education rather than employment. Being a primary or dependent visa applicant and cultural values regarding gender roles did not affect when the participants sought employment. This finding differed from the literature about trailing spouses and women delaying employment or search for employment until after the husband secured employment (Liverage, 2009; Wang, 2008). In the two previous cited studies, only one participant of the 21 participants emigrated with a family class visa. The differences in findings between this study and previous studies suggests that family reunification helps new immigrants adapt to the host country because their resident family members share what they have learned as to local cultural norms about gender roles, education, work, and social class. In addition, family members may help with housing and childcare that provide opportunities to enter the workforce earlier.

Whereas the criteria differed for each visa category, the literature suggested that the probability of experiencing professional identity negation was higher for people who immigrated with skilled-worker visas (Beyon et al., 2004; Grant & Nadin, 2007). That is, one's credentials were valued in receiving a visa but not valued in gaining employment. Although the participants did not immigrate as skilled workers, two of the participants (Ruby & Sterling) exhibited long-term professional identity negation by declaring that their salaries were lower than when they were in their homelands. Ruby found that the

three-level salary schedule for teachers did not truly reflect an individual's scholarship. In turn, she vocalized her opinion in a written article that was published by organization that promoted bilingual education. This was an uncharacteristic act for Ruby and a learned behavior to being heard and visible. The salary schedule stipulated number of units and not specific courses to earn the higher pay levels, so Sterling took courses that interested him. Negotiating between the past and present is an ongoing life process. Ruby and Sterling negotiated their professional identity struggle by recognizing that they were ultimately working as teachers.

All of the participants felt that their years of teaching experience in their homelands were valuable and that their skills were transferable. Skills that participants possessed were ability to engage students in learning using different methods such as singing or scaffolding, to recognize different student learning styles, to teach others how to do tasks, to monitor and assess student performance, to solve problems, to think creatively and critically in planning lessons and developing curriculum, to work with co-workers, and to communicate with parents. Transferable skills depended on the field of specialization such as bilingual skills for newcomer students. Participants' beliefs about the value of their prior experiences and skills coincided with previous studies reporting the use of prior knowledge and experiences to enhance skills or pursue new learning that would be compatible with employers' attractors in the new environment (Liverage, 2009; Reitz, 2003; Shih, 2005). The participants of this study used their knowledge of subject matter, skills, and work experiences to adapt to new types of jobs and later, U.S. teaching methodologies and curriculum development. High value of prior education and work experience was related to participants' level of commitment to the teaching profession

and, ultimately, their decision to pursue the re-credentialing process. This outcome was similar to prior studies about the difficulties immigrant professionals faced with re-entering their homeland profession, which led them to assess their level of commitment to their profession (Liverage, 2009; Lortie, 1975; Van Ngo & Este, 2006).

The overseas undergraduate education for two of three participants was deemed equivalent with the institutions they went to in California. The varied outcomes were consistent with previous studies that reported varying outcomes on evaluations of prior education equivalency with overseas-trained teachers and other professions in Canada (Beyon et al., 2004; Grant & Nadin, 2007; Kelley & Cui, 2007; Phillion, 2003). One participant (Pearl), who had teacher training and experience in her homeland, earned her education related bachelor's and master's degrees in the United States. However, only two of her courses were deemed equivalent to those at the institution she attended. Phillion (2003) reported a similar finding with one participant in Ontario, Canada. Nevertheless, this was surprising and disturbing because the expectation was that education equivalency would be greater when received in the same country and furthermore, in the same state. The amount of coursework varied for the participants and did not affect their commitment to becoming teachers again. This finding was consistent with prior research (Sinclair, 2008).

Two participants (Pearl & Sterling) contended that the re-credentialing requirements were rigid. One participant used the phrase "small box" as a metaphor in conveying that policy makers, credentialing agencies, and employers were closed to any alternatives regardless of individual human capital. All the participants had an interest in knowing who set the standard of equivalency with respect to knowledge and the degree of understanding education systems and work cultures of different countries. These opinions

supported other studies related to evaluation outcomes and occupational mobility in which those participants expressed that professional associations and employers were unfamiliar with the education and work culture of other nations. Yet, these entities tacitly controlled the criteria for acceptance to a profession and to an extent, the suitability for employment of individuals and groups with similar qualities (Salaff & Greve, 2003, Sangster, 2001; Van Ngo & Este, 2006; Zong, 2004).

Phillion (2003) categorized time and cost as systemic obstacles for immigrants' re-entry to the teaching profession. All the participants in this study had varying degrees of concern with time and costs. However, they honed their ability to persevere at young ages. They chose to adjust their lives in ways that permitted them to pursue their local credentials with the goal of reclaiming their professional identity as teachers. This adaptive strategy concurred with the study on career development of Chinese immigrant professionals in Massachusetts, which concluded that negotiating and adapting was a means of survival for personal and professional development (Shih, 2005).

Evaluation agencies deemed that the overseas teacher training of four participants was equivalent to U.S. accredited institutions. In addition, participants with at least 10 years of teaching experience received waivers for the student teaching practicum. These findings conflicted with the previous studies that reported devaluation of prior professional training (Beyon et al., 2004; Kelley & Cui, 2007; Phillion, 2003; Sangster, 2001) and the requirement of local experience for employment (Liverage, 2009; Van Ngo & Este, 2006; Wang, 2008; Zong, 2004). Location resulted in the different findings whereby previous studies attended to evaluation and requirements in Canada and Denmark.

Limited English fluency and accented English were perceived and real obstacles to employment reported in the literature (Beyon et al., 2004; Phillion, 2003; Shih, 2005; Wang, 2008; Zong, 2004). Two participants (Jade & Pearl) expressed that English was difficult for them in their initial studies toward their bachelor's degree. Two participants (Ming & Sterling) explained their adjustment from British English to American English. These difficulties did not prevent the participants from pursuing their goals as the literature suggested. This study expands the topic of language in that the participants increased their English fluency. In addition, their native languages were assets that opened them to more employment opportunities to which they all became bilingual cross-cultural teachers. Some participants developed curricula for Chinese language and culture courses and advised other organizations in various capacities in the United States and China.

In spite of the shortage of minority teachers and teachers for English language learners, the participants asserted that there were no advertisements nor recruitment targeted to their group—overseas-trained teachers—as Canada used to attract Jamaican teachers (Kelly & Cui, 2007). The mismatch between need and reality was that hiring overseas-trained teachers on a long-term basis was not a high priority of some employers (Vallejo & Garcia, 2001). This suggested that there was a relationship between employers' low priority in hiring overseas-trained teachers and the lack of resources that the participants experienced when they sought information about the teacher credentialing requirements, process, and procedures.

Employment experiences and observations led three of the participants (Jade, Ming, & Sterling) to express that employers favored native-born teachers in spite of their human capital and first-hand country cultural knowledge. Being an immigrant was a

disadvantage reported in previous studies on immigrant teachers in Canada and other professions (Beyon et al., 2004; Parlin 1976; Phillion, 2003).

Findings and Complexity Theory

The participants of this study, as individual and collective complex adaptive entities, were open to change in varying degrees over time. In similar fashion, their careers changed in varying degrees. This section discusses the dynamic interplay among the complexity science elements instrumental to the emergence of the participants.

China was a patriarchal society with the largest population in the world when the participants were born. China had a dearth of schools for all levels of education. The teacher-centered education style and frequency of high-stakes examinations was the country's efficient and objective strategy to serve their large student population. These were the initial conditions, at the national-level, in which participants began enculturation within their families. Participants adapted to change with each new sibling that changed the dynamics of the family structure. As participants grew older, change came in the form of new expectations by their parents. Family was the first node of participants' networks. Venturing outside of their homes, their networks grew with new types of entities through schooling and community activities.

Knowledge is a powerful attractor for change. Hence, the parents of the participants were attracted to the future success of their children and education served as a means and ends. Results on school entrance examinations and illness were events that became the initial conditions in which participants' responses demonstrated limit attractors. Jade's indecision on whether to immigrate to the United States with her parents exemplified the pendulum attractor. Sterling usually selected the most stable and secure option with his

decisions, which exhibited the point attractor. Pearl was caught up in a torus attractor as she cycled around and around in the competition with herself and her classmates for best exam scores. These three participants stated that they lacked self-confidence and generally made prudent choices. Although the participants generally took time in assessing their options before making decisions, unpredictable events led them to take risks. Attractors and repellers stimulated responses. For example, the silence by Pearl's father about her failure to get into the best high school was the event that resulted in her decision to enter a teacher preparation program at a vocational high school. The decision to emigrate was a risk of all the participants in that they were leaving the comforts of familiarity. Yet, this venture into the unknown was what excited Jade, Pearl, and Ming.

Family was the attractor to immigrate to the United States for four of the participants. These families were also the first networks of support for the participants' adaptation to their new environments. In addition, residing in areas with large Chinese populations eased participants' transition with finding fit and widening their networks. Ming and Pearl maintained networks abroad because their spouses and children were their only kin in the United States. Ruby and Sterling maintained some ties with friends abroad.

Before immigrating, four of the participants (Jade, Ruby, Pearl, & Ming) decided not to re-enter teaching in the United States. Both decisions to immigrate and discontinue teaching signified that they expected change, which was their initial condition upon arrival. Subsequently, chance events with a network of weak ties (former colleagues and acquaintances) and absent ties (strangers) were the strange attractors that called to participants' spirituality—experience of interconnectedness—of meaning and purpose whereby being and belonging unite. In deciding to reverse their original decisions,

participants were acknowledging that they would need to be open to institutional requirements and the effects on their time, income, and family for a finite period. Jade's first full-time teaching position was sensitively dependent on the initial condition of her and the hiring principal's background as people of color and historically marginalized groups. She was afforded an opportunity to tell her story that resonated with the principal.

Finally, this study illustrated that careers developed and changed throughout one's life and were sensitive to chance events, attractors, and networks. Each event caused one's energy to transit between order and chaos as she or he sought fit until the entity emerged anew. Immigrating and not teaching were planned decisions of change whereby adapting was necessary for survival. That understanding nurtured open-mindedness to which participants were receptive to the re-credentialing requirements. The participants' emergence as U.S. credentialed teachers and leaders of the respective students and subjects they taught supported Bloch's (2005) theory that careers were complex adaptive entities. Participants were confident in who they were, what their purpose was, and how they connected to the whole—the universe.

Implications and Recommendations

The findings from this study on overseas-trained immigrant Chinese public school teachers' career decisions to re-enter the teaching profession in the United States have implications for practice and future research. This section begins with implications and recommendations for four types of entities: (a) education policy makers and credentialing institutions, (b) school principals, (c) organizations assisting immigrants, and (d) future emigrant professionals. The following section presents recommendations for future research. The last section provides closing thoughts on this study.

Education Policy Makers and Credentialing Institutions

The shortage of minority teachers, teachers for English language learners and students with special needs, and teachers for math and science has persisted for decades. Yet, 30% of college-educated skilled immigrants in California were underutilized in 2006 (Batalova & Fix, 2008). The annual report by the Commission on Teacher Credentialing (2010a) about teacher supply in California did not include data about overseas-trained teachers. A search for data about overseas-trained teachers using the keywords overseas or out-of-country on the Commission's website in April 2011 resulted in a few dated papers (<http://www.ctc.ca.gov>). Since their arrival in the United States, participants in this study did not encounter any recruitment or advertisements for teachers, particularly targeted to immigrants. Chance events with a network of acquaintances and strangers aroused participants' attractors to teach in the United States. These findings implied that they were not desirable educators. If education policy makers are serious about increasing the number of teachers in the shortage categories, recruitment targeted to U.S.-resident immigrants would be an effective method to attract this group of educators to fill the need.

Overseas education that was not deemed equivalent to U.S. education in some respects implied that teacher preparation schools abroad were not as rigorous as teacher preparation schools in the United States and, thus, the participants' educations were of limited value. These participants had 8 to 15 years of teaching experience in their homelands. Alternative credential programs exist for people who do not have teaching preparation and experience, such as business professionals. A strategy for policy makers and credentialing institutions to consider is a program specifically for overseas-trained teachers that is relevant to their needs and respects their prior education and experiences.

An example is the Canadian program Transitions to Alberta Classrooms (TAC) that began in 2008 (Janusch, 2011). TAC is a six-month program to help overseas-trained teachers obtain the university credits needed to earn their Alberta teaching certificate and overcome barriers to finding employment as educators.

In seeking participants for this study, department heads and professors of private and public accredited institutions with teacher credential programs responded that they could not recall any former student that fit the criteria. Two educators claimed that many teachers fit the criteria of this study. One was a participant in this study and the other was a school district administrator, who was also a Chinese immigrant. These two educators earned their teaching credentials at one of the public institutions I contacted. One department head responded that permanent resident status was a requirement of immigrants who sought admittance to the teacher credential program. However, Ming was a nonimmigrant foreign student when he received permission to transfer from the Humanities department to the teacher credential department. In his first meeting with a program advisor after a year of study, he learned that, because of his prior education and teaching experience, the coursework was not necessary. These findings suggest that credentialing institutions do not know their students. Learning about the background of students in teacher preparation programs fosters two-way communication. The exchange would create a learning loop by which professors and students learn from each other. Immigrants could share information about the education systems, curricula, and teaching in their homelands. Professors could use this knowledge to compare with the U.S. education system. This would be beneficial in preparing teachers who will work with

ethnically diverse groups of students and educators. Preservice teachers will be better equipped to adapt their teaching methods accordingly.

School Principals

Participants felt that principals favored native-born teachers. This implied that the principals found overseas-trained teachers less knowledgeable in subject matter and teaching skills. Yet, school administrators recognized the expertise of several participants. These participants became curriculum specialists who developed curricula in the subject of their expertise for teachers in their respective school districts. With respect to instruction for Chinese language and culture, native-born teachers did not have the cultural knowledge to translate documents and interpret correctly, so the work fell to the participants. When considering the ethnicity and immigrant students at one's school, school principals might consider learning more about the knowledge and skills of their overseas-trained immigrant teacher applicants before making hiring decisions.

The larger issue of teacher shortage was retention of teachers (Ingersoll, 2003). Recruiting and hiring overseas teachers on a short-term basis (Vallego & Garcia, 2001) or through the H-1B temporary visa program exacerbated the retention problem and was expensive (National Commission on Teaching and America's Future, 2007). In addition, the guest worker program is historically problematic, as with the Bracero Program, as well as recent exploitation by recruiting agencies of overseas teachers wielding their power to control the human agency of others in various parts of the nation (Happell, 2009). These people. The participants' combined years of teaching experience in their homelands and the United States, at the time of this study, ranged from 12 to 35 years. The findings from this study found that four of the five participants did not plan to teach

in the United States but changed their minds because they valued their prior experiences, wished to build on their transferable skills, and were committed to the teaching profession. It would be prudent for school leaders to consider employing U.S.-resident overseas-trained immigrant teachers, which will ultimately benefit students.

Organizations Assisting Immigrants

Participants stressed the lack of resources in seeking information about re-credentialing requirements, process, and procedures. This implies that the need for this type of information is not known. Organizations that assist immigrants might consider working with credentialing institutions, teacher organizations, and school districts to develop materials and resource directories for immigrants to access locally.

Future Emigrant Professionals

Change is a consequence of emigration. Interacting forces of attractors, networks, and chance events led participants to re-enter their original teaching profession and emerge as teachers with new funds of knowledge. This implies that their success was sensitive to being open to adapting. In addition, their attractors nurtured their commitment to the teaching profession. Overseas-trained teachers who may consider immigrating to the United States can draw upon the experiences portrayed in this study. This study showed that networks of overseas-trained immigrants exist. This community of practice would be a valuable resource for new immigrants.

Future Research

What we do not understand is just as important as what we do understand. While this study fills a gap in research particular to overseas-trained immigrant teachers in

public schools, there are a number of suggestions for future research. First, based on the participants in this study, research with immigrants with fewer years of teaching experience before immigration, such as one to three years, warrants investigation. Immigrants with less years of teach experience might face more requirements such as student teaching and a longer process that could be a factor in their commitment to the teaching profession. Second, the delimiters of this study prompt further research with other ethnic groups and other locations. Third, the size of the underutilized college-educated immigrant population is disturbing. Overseas-trained immigrant teachers who work in other professions are another group worthy of study to understand the complexity elements of their lives and careers.

Fourth, the different outcomes on the evaluation of foreign transcripts, degrees, and teacher training of the participants in this study, and as reported in the review of literature, demonstrate a need for research on inter-rater reliability of international-credential evaluators. Whereas evaluation agencies are private organizations, research that compares evaluators within an agency and between agencies would help ensure the validity of evaluations. In addition, immigrants' attractors and process with selecting an evaluation agency bear investigation.

Fifth, some administrators are hesitant to hire overseas-trained teachers. Yet, participants in this study expressed that their homeland and U.S. experiences were the assets for understanding their U.S. students, especially immigrant students. Research that compares the academic achievement and other performance markers of students educated by overseas-trained immigrant teachers and U.S.-born teachers merits exploration.

Lastly, a methodological finding emerged that suggested the need for future research. The difficulty in securing participants for this study brought forth the topic of cultural communication differences between individualistic and collectivistic cultures. In collectivist societies, most people define themselves by their relationship to others (Gao & Ting-Toomy, 1998; Hofstede, 1980; Triandis, 1988). Insiders and outsiders are the two groups that form others. Insiders are people who one has a close relationship with, like family and personal friends. Outsiders are acquaintances and strangers. This study was about Chinese people who “make clear distinctions between insiders and outsiders” (Gao & Ting-Toomy, 1998, p. 15) and many “do not feel competent or comfortable dealing with outsiders” (p. 17). Kvale and Brinkman (2009) noted some issues in conducting cross-cultural interviews but they and other publications about research methods did not offer any guidance on issues and the process for participant recruitment. I found one empirical study about barriers with recruiting Chinese people by Hinton, Guo, Hillygus, and Levkoff (2000). The lack of research on the recruitment of immigrant participants for qualitative studies deserves investigation.

Closing Thoughts

Learning evokes excitement and fear. Learning is an ongoing process grounded in experience. Learning is an independent relationship between the learner and her or his environment. “All research is partial, situated and shaped by who we are” (Hondagneu-Sotelo, 2001, p. xv). This study was the opportunity to present a group of educators who could have understood me during my early education years. Although I am Chinese, the recruitment of participants reminded me of my cultural norms that I overlooked with my attention to American cultural norms. But as the participants shared their values, parent

expectations, cultural practices, and individual struggles, I felt a sense of unity with them as if they were recounting some aspects of my life. I was both surprised and not surprised by their independence and resilience at such young ages. How many 12-year-olds seek and secure schooling by themselves? Their emotions of being made to “feel bad,” “stuck out,” “uncomfortable,” “low self-esteem,” and “embarrassed” resonated with me. All these aspects interconnected with their career decisions and who they have become—role models—highly educated and skilled educators and reflective practitioners of life.

Complexity theory and the life history approach proved to be effective in revealing emergent patterns of relationships for understanding the whole person and the research problem. Otherwise, parts alone distort truth and meaning of the entities. This methodology supported individuals’ right to be in control of their lives. Storytelling and conversation are emergent processes in which “Meaning is always relational and thus inevitably contextual. As relations change and context shifts, meaning transforms” (Taylor, 2001, p. 210). A small moment can turn out to be significant. As my last interview session with Ming came to a close, he shared that after reflecting on my interpretation of his aspirations, he discovered that his passion was teaching, not administering. He no longer regretted not earning an administrative credential. He appreciated journeying through the threads of his life and relieved of his only regret. Granted, representing the participants encompassed a difficult ethical responsibility in which writing, as well as education, is never neutral (Freire, 2007; Sikes, 2010). Scholarly research upholds objectivity as valid, yet people are subjective beings. Being an ethnic “insider” of the participant group posed a dilemma with what to disclose—balancing respectful sensitivity and care with integrity of the participants and the research study.

Immersion in the participants' stories opened me to new knowledge and views to better appreciate their experiences and practical wisdom, as well as find connections with them. The province of Sterling's family is that of my mother's province. Ruby had visited the provinces of both my parents. Ming used my travels in China to help me understand how the definition of city and country differs between his homeland and the United States. In addition, we were both doctoral students of educational leadership at the time of this study. Jade prompted fond memories of playing school with my sister. Pearl and I shared an interest in middle school age students as well as a name. I am emerging more enriched with a new set of friends and looking forward to the untold stories by voices of people who await hearing.

REFERENCES

- Aud, S., Hussar, W., Planty, M., Snyder, T., Bianco, K., Fox, M., Frohlich, L., Kemp, J., & Drake, L. (2010). *The condition of education 2010* (NCES 2010-028). Washington, DC: U.S. Department of Education, National Center for Education Statistics, Institute of Education Sciences.
- Bagchi, A. D. (2001). Migrant networks and the immigrant professional: An analysis of the role of weak ties. *Population Research and Policy Review*, 20(1-2), 9-31. doi:10.1023/A:1010608225985
- Barabási, A.-L. (2003). *Linked: How everything is connected to everything else and what it means for business, science, and everyday life*. New York, NY: Penguin Group.
- Barber, R. (2003). *A report to the national education association on trends in foreign teacher recruitment*. Washington, DC: Center for Economic Research. Retrieved from <http://web.archive.org/web/20040212062559/www.nea.org/teachershortage/images/foreignteacher.pdf>
- Batalova, J., & Fix, M. (with Creticos, P. A). (2008). *Uneven progress: The employment pathways of skilled immigrants in the United States*. Retrieved from Migration Policy Institute website: <http://www.migrationpolicy.org/pubs/BrainWasteOct08.pdf>
- Batalova, J., & Terrazas, A. (2010). *Frequently requested statistics on immigrants and immigration in the United States*. Retrieved from <http://www.migrationinformation.org/USfocus/display.cfm?ID=818>
- Becker, H. S. (1960). Notes on the concept of commitment. *The American Journal of Sociology*, 66(1), 32-40. Retrieved from <http://www.jstor.org/stable/2773219>
- Beynon, J., Ilieva, R., & Dichupa, M. (2004). Re-credentialling experiences of immigrant teachers: Negotiating institutional structures, professional identities and pedagogy. *Teachers and Teaching: Theory and Practice*, 10(4), 429-444. doi:10.1080/1354060042000224160
- Bloch, D. P. (2004). Spirituality, complexity, and career counseling. *Professional School Counseling*, 7(5), 343-350.
- Bloch, D. P. (2005). Complexity, chaos, and non-linear dynamics: A new perspective on career development theory. *The Career Development Quarterly*, 53(3), 194-207.
- Boe, E. E., & Cook, L. H. (2006). The chronic and increasing shortage of fully certified teachers in special and general education. *Exceptional Children* 72(4), 443-460.
- Bright, J. E. H., Pryor, R. G. L., & Harpham, L. (2005). The role of chance events in career decision making. *Journal of Vocational Behavior*, 66(3), 561-576. doi:10.1016/j.jvb.2004.05.001

- Bronowski, J. (1978). *The origins of knowledge and imagination*. New Haven, CT: Yale University Press.
- Buber, M. (1996). *I and Thou*. (W. Kaufman, Trans. Touchstone ed.). New York, NY: Simon & Schuster. (Original published 1923)
- California Department of Education, Educational Demographics Office. (2010a). *Profile of district: San Francisco unified, fiscal year 2009-10*. Retrived March 8, 2011, from <http://www.ed-data.org/Navigation/fsTwoPanel.asp?bottom=%2Fprofile%2Easp%3Flevel%3D06%26reportNumber%3D16>
- California Department of Education, Educational Demographics Office. (2010b). *Profile of state: Fiscal year 2009-10*. Retrived March 8, 2011, from <http://www.ed-data.org/Navigation/fsTwoPanel.asp?bottom=%2Fprofile.asp%3Flevel=04%26reportNumber=16>
- Castells, M. (2000). *The rise of the network society*. (2nd ed. Vol. 1). Malden, MA: Blackwell Publishers Inc.
- Choi, P. L., & Tang, S. Y. F. (2009). Teacher commitment trends: Cases of Hong Kong teachers from 1997 to 2007. *Teaching and Teacher Education*, 25(5), 767-777. doi:10.1016/j.tate.2009.01.005
- Commission on Teacher Credentialing. (2007, April). Where did out-of-country teachers come from in 2005-06? *CTC Stat of the Month*. Retrieved from <http://www.ctc.ca.gov/educator-prep/statistics/2007-04-stat.pdf>
- Commission on Teacher Credentialing. (2009, June). Trends in credentials issued to out-of-country trained teachers. *CTC Stat of the Month*. Retrieved from <http://www.ctc.ca.gov/educator-prep/statistics/2009-06-stat.pdf>
- Commission on Teacher Credentialing. (2010a). *Teacher supply in California: A report to the legislature annual report 2008-09*. Retrieved from http://www.ctc.ca.gov/reports/TS_2008-2009_AnnualRpt.pdf
- Commission on Teacher Credentialing. (2010b, October). Teaching credentials issued to teachers who were trained in other countries. *CTC Stat of the Month*. Retrieved from <http://www.ctc.ca.gov/educator-prep/statistics/2010-10-stat.pdf>
- Confucius. (1992). *The analects (Lun yü)*. (D. C. Lau, Trans. 2nd ed.). Hong Kong, China: The Chinese University Press.
- Coopersmith, J. (2009). *Characteristics of public, private, and bureau of Indian education elementary and secondary school teachers in the United States: Results from the 2007-08 schools and staffing survey* (NCES 2009-324). Washington, DC: U.S. Department of Education, National Center for Education Statistics, Institute of Education Sciences.

- Darling-Hammond, L. (2000). *Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring and qualified teacher for every child*. New York, NY: National Commission on Teaching & America's Future.
- Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future*. New York, NY: Teachers College Press.
- Darling-Hammond, L., & Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge? *Education Policy Analysis Archives*, 11(33). Retrieved from <http://epaa.asu.edu/ojs/article/view/261/387>
- Davis, B., & Sumara, D. (2006). *Complexity and education: Inquiries into learning, teaching, and research*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Denzin, N. K. (1989). *Interpretive biography*. Newbury Park, CA: SAGE Publications, Inc.
- Eliassen, R. H., & Anderson, E. W. (1934). Teacher personnel. *Review of Educational Research* 4(3), 257-260.
- Feistritzer, C. E. (1998, January 28). The truth behind the 'teacher shortage.' *Wall Street Journal*, p.1.
- Ferguson, R. F. (2002). *What doesn't meet the eye: Understanding and addressing racial disparities in high-achieving suburban schools*. Oak Brook, IL: North Central Regional Educational Laboratory.
- Fortuny, K., Capps, R., Simms, M., & Chaudry, A. (2009, August). *Children of immigrants: National and state characteristics, Brief 9*. Retrieved from Urban Institute website: <http://www.urban.org/publications/411939.html>
- Freire, P. (2007). *Education for critical consciousness*. New York, NY: Continuum. (Original work published 1974)
- Futernick, K. (2007). *A possible dream: Retaining California teachers so all students learn*. Sacramento, CA: California State University Center for Teacher Quality. Retrieved from http://www.calstate.edu/teacherquality/documents/possible_dream.pdf
- Gao, G., & Ting-Toomey, S. (1998). *Communicating effectively with the Chinese*. Thousand Oaks, CA: Sage Publications, Inc.
- Gay, G., Dingus, J. E., & Jackson, C. W. (2003). *The presence and performance of teachers of color in the profession*. Washington, D.C.: Community Teachers Institute. Retrieved from <http://s.b5z.net/i/u/10091736/f/PresPerfTeachersofColoringProfess.pdf>

- Goerner, S. J. (1999). *After the clockwork universe: The emerging science and culture of integral society*. Edinburgh, Scotland: Floris Books.
- Goldstein, J. (1999). Emergence as a construct: History and issues. *Emergence: Complexity & Organization*, 1(1), 49-72.
- Goodson, I. F. & Sikes, P. (2001). *Life history research in educational settings: Learning from lives*. Philadelphia, PA: Open University Press.
- Granovetter, M. S. (1973). The strength of weak ties. *The American Journal of Sociology*, 78(6), 1360-1380. Retrieved from <http://www.jstor.org/stable/2776392>
- Granovetter, M. S. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory*, 1, 201-233. Retrieved from <http://www.jstor.org/stable/202051>
- Grant, P., & Nadin, S. (2007). The credentialing problems of foreign trained personnel from Asia and Africa intending to make their home in Canada: A social psychological perspective. *Journal of International Migration and Integration*, 8(2), 141-162. doi:10.1007/s12134-007-0011-2
- Guo, S., & Andersson, P. (2005). *Non/recognition of foreign credentials for immigrant professionals in Canada and Sweden: A comparative analysis* (Working Paper #WP04-05). Edmonton, Canada: Prairie Metropolis Center. Retrieved from <http://pcerii.metropolis.net/WorkingPapers/WP04-05.pdf>
- Hammer, C. H., & Gerald, E. (1990). *Selected characteristics of public and private school teachers: 1987-88*. (NCES 90-087). Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.
- Happell, K. (2009). *Importing educators: Causes and consequences of international teacher recruitment*. Washington, DC: American Federation of Teachers. Retrieved from <http://www.eric.ed.gov/PDFS/ED506557.pdf>
- Hinton, L., Guo, Z., Hillygus, J., & Levkoff, S. (2000). Working with culture: A qualitative analysis of barriers to the recruitment of Chinese-American family caregivers for dementia research. *Journal of Cross-Cultural Gerontology*, 15(2), 119-137. doi:10.1023/a:1006798316654
- Hofstede, G. (1980). *Cultural consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications, Inc.
- Holland, J. H. (1995). *Hidden order: How adaptation builds complexity*. Reading, MA: Helix Books.
- Hondagneu-Sotelo, P. (2001). *Doméstica: Immigrant workers cleaning and caring in the shadows of affluence*. Berkeley, CA: University of California Press.

- Illich, I. (1971). *Deschooling society*. New York, NY: Harper & Row.
- Ingersoll, R. M. (2003). *Is there really a teacher shortage?* Seattle, WA: University of Washington, Center for the Study of Teaching and Policy. Retrieved from <http://depts.washington.edu/ctpmail/PDFs/Shortage-RI-09-2003.pdf>
- Isbister, J. (1996). *The immigraton debate: Remaking America*. West Harford, CT: Kumarian Press, Inc.
- Janusch, S. (2011). *Crossing cultural bridges: Stories of immigrant teachers in Alberta*. Alberta, Canada. Retrieved January 11, 2011, from http://westcast.ca/site-archive/2010/files/Crossing_Cultural_Bridges.pdf
- Jorgenson, O. (2000, September 13). The need for more ethnic teachers: Addressing the critical shortage in American public schools. *Teachers College Record*. Retrived from <http://www.tcrecord.org/content.asp?contentid=10551>
- Kauffman, S. (1995). *At home in the universe: The search for laws of self-organization and complexity*. New York, NY: Oxford University Press.
- Kearney, R. (2001). *On stories*. London, England: Routledge.
- Kellert, S. H. (1993) *In the wake of chaos: Unpredictable order in dynamical systems*. Chicago, IL: The University of Chicago Press.
- Kelly, J., & Cui, D. (2007). *Immigration & credentialing: A case study of Jamaican teachers in 1960s Alberta*. Paper presented at the Learning In Community: Proceedings of the joint international conference of the Adult Education Research Conference (AERC) (48th National Conference) and the Canadian Association for the Study of Adult Education (CASAE)/l'Association Canadienne pour l'Étude de l'Éducation des Adultes (ACÉÉA) (26th National Conference). Halifax, Nova Scotia. Retrieved from <http://www.oise.utoronto.ca/CASAE/cnf2007/Proceedings-2007/AERC%20CASAE%20Kelly%20Cui-2007.pdf>
- Kvale, S. & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Lewis, M. S. (1996). Supply and demand of teachers of color. *ERIC Digest*. ED390875. Retrieved from <http://www.ericdigests.org/1996-3/supply.htm>
- Liversage, A. (2009). Vital conjunctures, shifting horizons: High-skilled female immigrants looking for work. *Work Employment Society*, 23(1), 120-141. doi:10.1177/0950017008099781
- Lorenz, E. N. (1963). The predictability of hydrodynamic flow. *Transactions of the New York Academy of Sciences*, 25(4), 409-432. Retrieved from http://eapsweb.mit.edu/research/Lorenz/Predictability_hydrodynamic_flow_1963.pdf

- Lorenz, E. N. (1993). *The essence of chaos*. Seattle, WA: University of Washington Press.
- Lortie, D. C. (2002). *Schoolteacher: A sociological study* (2nd ed.). Chicago, IL: The University of Chicago Press.
- Maasek, R. (1951). Analysis of trends in teacher supply and demand, 1900-1950. *Journal of Teacher Education* 2(4), 263-268.
- Mackun, P. & Wilson S. (2011, March). Population distribution and change: 2000 to 2010 (C2010BR-01). *2010 Census Briefs*. Washington, DC: U.S. Department of Commerce, Census Bureau. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf>
- Man, G. (2004). Gender, work and migration: Deskillling Chinese immigrant women in Canada. *Women's Studies International Forum*, 27(2), 135-148. doi:10.1016/j.wsif.2004.06.004
- Markova, D. (2008). Spiritual courage: Leading from the inside out. In P. D. Houston, A. M. Blankstein & R. W. Cole (Eds.), *Spirituality in educational leadership* (pp. 37-48). Thousand Oaks, CA: Corwin Press.
- Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York, NY: Harper & Row.
- Maslow, A. H. (2005). A theory of human motivation. In J. Shafritz, J. S. Ott & Y. S. Jang (Eds.), *Classics of organization theory* (6th ed., pp. 167-178). Belmont, CA: Thomson Wadsworth. (Reprint from *Psychological Review* 50, pp. 370-396, 1943)
- Mattoo, A., & Mishra, D. K. (2008). *Foreign professionals and domestic regulation* (Policy research working paper No. 4782). Retrieved from The World Bank website: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/11/18/000158349_20081118152749/Rendered/PDF/WPS4782.pdf
- Maul, R. C. (1965). A turning point in teacher supply. *Journal of Teacher Education* 16(4), 432-437. doi:10.1177/002248716501600411
- McCarthy, K. F., & Vernez, G. (1997). *Immigration in a changing economy. California's experience*. Santa Monica, CA: RAND.
- McKenzie, D., & Rapoport, H. (2006). *Self-selection patterns in Mexico-U.S. migration: The role of migration networks* (Working Paper No. MSN MC3-300). Washington D.C.: The World Bank.
- McKown, C., & Weinstein, R. S. (2008). Teacher expectations, classroom context, and the achievement gap. *Journal of School Psychology*, 46(3), 235-261. doi:10.1016/j.jsp.2007.05.001
- Miller, P. (2008). Degrading, devaluing and discounting: The qualifications of overseas trained teachers (OTT) in England. *Perspectives in Education*, 26(1), 25-36.

- Mitchell, K. E., Levin, A. S., & Krumboltz, J. D. (1999). Planned happenstance: Constructing unexpected career opportunities. *Journal of Counseling & Development, 77*(2), 115-124.
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice, 31*(2), 132-141.
- NAFSA: Association of International Educators. (2009). *A guide to selecting a foreign credentials evaluation service*. Retrieved November 21, 2009, from <http://www.nafsa.org/resource/library/default.aspx?Id=8817>
- Naisbitt, J., Flaum, T. K., & Handlin, O. (2008). United States: Immigration. In *Encyclopedia Britannica Online*. Retrieved from <http://www.britannica.com/EBchecked/topic/616563/United-States/78004/Immigration>
- National Commission on Teaching and America's Future. (2007). *Policy Brief: The high cost of teacher turnover*. Washington, DC: Author. Retrieved from http://nctaf.org/resources/demonstration_projects/turnover/TeacherTurnoverCostStudy.htm
- Newman, E. (2010). Becoming a gay male primary teacher: Dealing with difference. In A.-M. Bathmaker & P. Harnett (Eds.), *Exploring learning, identity and power through life history and narrative research* (pp. 39-54). New York, NY: Routledge.
- Nieto, S. (2000). *Affirming diversity: The sociopolitical context of multicultural education*. New York, NY: Addison Wesley Longman, Inc.
- No Child Left Behind [NCLB] Act of 2001, Pub. L. No. 107-110, § 9101. (2002). Retrieved from <http://www.ed.gov/policy/elsec/leg/esea02/pg107.html> - sec9101
- Ogbu, J. U. (2003). *Black American students in an affluent suburb: A study of academic disengagement*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Olsen, L. (1997). *Made in America: Immigrant students in our public schools*. New York, NY: The New Press.
- Parlin, B. W. (1976). *Immigrant professionals in the United States: Discrimination in the scientific labor market*. New York, NY: Praeger Publishers.
- Passel, J. S., & Cohn, D. (2010, September). U.S. unauthorized immigration flows are down sharply since mid-decade. *Pew Hispanic Center Report*. Retrieved from Pew Hispanic Center website: <http://pewhispanic.org/files/reports/126.pdf>
- Patton, M. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Pfaelzer, J. (2007). *Driven out: The forgotten war against Chinese Americans*. New York, NY: Random House.

- Phillion, J. (2003). Obstacles to accessing the teaching profession for immigrant women. *Multicultural Education, 11*(1), 41-45.
- Plummer, K. (2001). *Documents of life 2: An invitation to a critical humanism*. Thousand Oaks, CA: SAGE Publications Inc.
- Pryor, R. G. L., & Bright, J. E. H. (2007). Applying chaos theory to careers: Attraction and attractors. *Journal of Vocational Behavior, 71*(3), 375-400. doi:10.1016/j.jvb.2007.05.002
- Purkayastha, B. (2005). Skilled migration and cumulative disadvantage: The case of highly qualified Asian Indian immigrant women in the U.S. *Geoforum, 36*(2), 181-196. doi:10.1016/j.geoforum.2003.11.006
- Reitz, J. (2001). Immigrant skill utilization in the Canadian labour market: Implications of human capital research. *Journal of International Migration and Integration, 2*(3), 347-378. doi:10.1007/s12134-001-1004-1
- Reitz, J. G. (2003, February). *Occupational dimensions of immigrant credential assessment: Trends in professional, managerial and other occupations, 1970-1996*. Retrieved from University of Toronto, Ethnic, Immigration, and Pluralism Studies website: <http://www.utoronto.ca/ethnicstudies/occupational.pdf>
- Rong, X. L., & Preissle, J. (1997). The continuing decline in Asian American teachers. *American Educational Research Journal, 34*(2), 267-293. doi:10.3102/00028312034002267
- Salaff, J., & Greve, A. (2003). Gendered structural barriers to job attainment for skilled Chinese emigrants in Canada. *International Journal of Population Geography, 9*(6), 443-456. doi:10.1002/ijpg.310
- San Francisco Unified School District. (2009, August 20). *S.F.U.S.D. school profiles 2008-2009 (Fall 2008): San Francisco unified school district summary*. Retrieved December 31, 2009, from <http://orb.sfusd.edu/profile/prfl-100.htm>
- Sangster, D. (2001). *Assessing and recognizing foreign credentials in Canada—employers' views*. Ottawa, Canada: Canadian Labor and Business Centre.
- Shih, Y. (2005). *Narratives of Chinese female immigrant professionals: Factors that affect their career development and strategies used for career adjustment* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3163709).
- Sikes, P. (2010). The ethics of writing life histories and narratives in educational research. In A.-M. Bathmaker & P. Harnett (Eds.), *Exploring learning, identity and power through life history and narrative research* (pp. 11-24). New York, NY: Routledge.

- Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to teaching. *Asia-Pacific Journal of Teacher Education*, 36(2), 79-104.
doi:10.1080/13598660801971658
- Smith, L. T. (1999). *Decolonizing methodologies: Research and indigenous peoples*. London, England: Zed Books Ltd.
- Stacey, R. (2005). Values, spirituality and organizations: A complex responsive processes perspective. In D. Griffin & R. Stacey (Eds.), *Complexity and the experience of leading organizations* (pp. 93-123). New York, NY: Routledge.
- Statistics Canada. (2008). Low income cut-offs for 2007 and low income measures for 2006 (No. 75F0002M-004). *Income Research Paper Series*. Retrieved from <http://www.statcan.gc.ca/pub/75f0002m/75f0002m2008004-eng.pdf>
- Takaki, R. T. (1998). *Strangers from a different shore: A history of Asian Americans*. Boston, MA: Little, Brown and Company.
- Taylor, M. L. (2001). *The moment of complexity: Emerging network culture*. Chicago, IL: The University of Chicago Press.
- The New Teacher Project. (2009). *Teacher Hiring, Transfer, & Evaluation in San Francisco Unified School District*. Brooklyn, NY: Author. Retrieved from http://www.tntp.org/files/TNTP_SFUSD_Full_Report_020509F.pdf
- Tilly, C. H. (1990). Transplanted networks. In V. Yans-McLaughlin (Ed.), *Immigration reconsidered: History, sociology, and politics* (pp. 70-95). New York, NY: Oxford University Press.
- Toffler, A. (1984). Science and change. In I. Prigogine & I Stengers, *Order out of chaos: Man's new dialogue with nature* (pp. xi-xxxi). New York, NY: Bantam Books.
- Triandis, H. (1988). Collectivism vs individualism: A reconceptualization of a basic concept in cross-cultural psychology. In G. K. Verma & C. Bagley (Eds.), *Cross-cultural studies of personality, attitudes, and cognition* (pp. 60-95). London, England: Macmillan.
- United Nations, Department of Economic and Social Affairs, Population Division. (2009, July). *Trends in international migrant stock: The 2008 revision* (United Nations database, POP/DB/MIG/Stock/Rev.2008). Retrieved March 20, 2011, from http://www.un.org/esa/population/publications/migration/UN_MigStock_2008.pdf
- U.S. Bureau of Labor Statistics. (2007-2011). *Foreign-born workers: Labor force characteristics – 2006-2010*. Washington, DC: U.S. Department of Labor. Retrieved from http://www.bls.gov/schedule/archives/all_nr.htm#FORBRN

- U.S. Census Bureau. (2010). *Table 2. Annual Estimates of the Population of Combined Statistical Areas: April 1, 2000 to July 1, 2009* (CBSA-EST2009-02). Retrieved January 31, 2011, from <http://www.census.gov/popest/metro/tables/2009/CBSA-EST2009-02.xls>
- U.S. Census Bureau (2011). San Jose-San Francisco-Oakland, CA CSA, Population Group: Chinese alone. *2007-2009 American Community Survey*. Retrived February 3, 2011, from http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuId=&_lang=en&_ts=
- U.S. Citizenship and Immigration Services. (2006). *Characteristics of specialty occupation workers (H-1B): Fiscal year 2005*. Washington, D.C.: U.S. Department of Homeland Security, Office of Immigration Statistics.
- U.S. Department of Homeland Security. (2009). *Immigration: Definition of terms*. Retrieved from <http://www.dhs.gov/files/statistics/stdfdef.shtm>
- U.S. Department of Homeland Security. (2010a). *Persons obtaining legal permanent resident status during fiscal year 2005, 2006, 2007, 2008, 2009 by state of residence and selected characteristics: California*. Retrieved November 30, 2010, from <http://www.dhs.gov/files/statistics/data/DSLPR09s.shtm>
- U.S. Department of Homeland Security. (2010b). *Yearbook of immigration statistics: 2009*. Washington, D.C.: Office of Immigration Statistics.
- U.S. Network for Education Information. (2007). *Recognition of foreign qualifications: Professional recognition*. Washington, DC: U.S. Department of Education, International Affairs Office. Retrived September 9, 2008, from <http://www.ed.gov/about/offices/list/ous/international/usnei/us/profrecog.doc>
- Vallejo, C., & Garcia, A. G. (2001). *Teacher recruitment and employment practices in selected states: Promising prospects for foreign-trained teachers* (Monograph). Retrived from Intercultural Development Research Association website: <http://www.idra.org/images/stories/Teacher%20Recruitment%20and%20Employment%20Practices%20in%20Selected%20States.pdf>
- Van Ngo, H., & Este, D. (2006). Professional re-entry for foreign-trained immigrants. *Journal of International Migration and Integration*, 7(1), 27-50. doi:10.1007/s12134-006-1001-5
- Vazquez-Nuttall, E., Li, C., & Kaplan, J. P. (2006). Home-school partnerships with culturally diverse families: Challenges and solutions for school personnel. *Journal of Applied School Psychology*, 22(2), 81-102. doi:10.1300/J370v22n02_05
- Vernez, G. (1999). *Immigrant women in the U.S. workforce: Who struggles? Who succeeds?* Lanham, MD: Lexington Books.

- Wang, H. (2008). *Dancing with maple leaves: Labour market experience of immigrant women professionals* (Master's thesis, University of Toronto, Ontario, Canada). Retrieved from <http://hdl.handle.net/1807/16611>
- Yong, B. C.-S. (1995). Teacher trainees' motives for entering into a teaching career in Brunei Darussalam. *Teaching and Teacher Education*, 11(3), 275-280. doi:10.1016/0742-051X(94)00023-Y
- Yong, B. C.-S. (1999). The career commitment of primary teachers in Brunei Darussalam: Perceptions of teaching as a career. *Research in Education*, 62(2), 1-9. Retrieved from <http://www.manchesteruniversitypress.co.uk/uploads/docs/620001.pdf>
- Yu, J. (1998). Virtue: Confucius and Aristotle. *Philosophy East & West*, 48(2), 323-348.
- Yu, J. (2006). Yi: Practical wisdom in Confucius's analects. *Journal of Chinese Philosophy*, 33(3), 335-348. doi:10.1111/j.1540-6253.2006.00363.x
- Zhou, Y. (2000). The fall of "the other half of the sky"? Chinese immigrant women in the New York area. *Women's Studies International Forum*, 23(4), 445-459. doi:10.1016/S0277-5395(00)00106-0
- Zong, L. (2004). *International transference of human capital and occupational attainment of recent Chinese professional immigrants in Canada* (Working Paper No. WP03-04). Edmonton, Canada. Retrieved from Prairie Metropolis Center website: <http://pcerii.metropolis.net/WorkingPapers/WP03-04.pdf>

APPENDICES

Appendix A: Contacting Prospective Participants

Hello _____.

My name is Lily Chow and _____ suggested I contact you. I am a doctoral student in the School of Education at the University of San Francisco. I am working on a study focusing on the lived experiences of foreign-trained immigrant schoolteachers who became California credentialed teachers. I understand that there are a number of issues that immigrant professionals face with career decisions about reentering their chosen professions in their host country.

The purpose of my call (message) is to seek your participation in collaborating with me on this study. Participation entails two interviews lasting about 90 minutes each. The first interview asks you to tell your life story. Based on your story, in the second interview, I will ask for more details about certain times and events. In addition, I will ask about your perspective on commitment to the teaching profession. Afterwards, I will give you a written summary of what I heard and ask you to review it for accuracy. A follow-up interview will allow you to clarify any misunderstandings and add information. The follow-up session will last about 45 to 60 minutes.

Please know that I will protect your identity by using a pseudonym. I may quote directly from the interviews in my dissertation, but I will protect your confidentiality by using codes and securing computer files and printed documents at all times.

I believe that your life story will be an asset to my study. Please know that I respect and value your time. Would you like to participate in my study? If yes, I will send you a consent form that provides more details about my study, participant's rights, and contact information for you to review, sign, and return to me. Please let me know when would be a convenient time for you for our first interview. If no, I would be most grateful if you could recommend another teacher that may have an interest to participate in my study. Thank you very much for your consideration. I look forward to hearing from you.

Respectfully,

Lily Chow

Appendix B: Contacting An Organization For Participants

Dear _____.

My name is Lily Chow and I am seeking your help. I am a doctoral student in the School of Education at the University of San Francisco. I am conducting a study about the personal and structural conditions that affected the career decisions of foreign-trained immigrant schoolteachers who became California credentialed teachers. My focus of interest is the life story of individuals in which people and events bear significance to their career interests, aspirations, expectations, commitment, and mobility.

I am seeking participants to collaborate with me in this study. The criteria for qualification are female natives of China, who earned their teaching credential outside of the United States, immigrated to the United States, became California-credentialed schoolteachers, and currently teach in a public K-12 school in the San Francisco area. Participation entails two interviews lasting about 90 minutes each and one follow-up session that will take about 45 to 60 minutes. I will audio record the interviews and all the information communicated will be kept confidential.

Since your organization serves my target group, I would like to know if some members might have an interest to participate in my study. I would be most grateful for your help in identifying and facilitating a means for me to connect with some of your members. If you would like more information, please contact me. I appreciate your time and consideration. I look forward to hearing from you.

Respectfully,

Lily Chow

Appendix C: Cover Letter to Consent Form

Date

Dear Schoolteacher:

My name is Lily Chow and I am a graduate student in the School of Education at the University of San Francisco. I am conducting a study about the personal and structural conditions that affected the career decisions of foreign-trained immigrant schoolteachers who became California credentialed teachers. My focus of interest is the life story of individuals in which people and events bear significance to their career interests, aspirations, expectations, commitment, and mobility.

I am inviting you to participate in this research study because you are a native of China (includes Hong Kong and Taiwan), earned your undergraduate degree or teaching training outside of the United States, immigrated to the United States, became a California credentialed schoolteacher, and are currently a public K-12 schoolteacher or retiree in the San Francisco area. If you agree to participate in this study, I will ask for your involvement in the following ways:

- (a) Permission to interview you for two sessions lasting approximately 90 minutes each, and one follow-up session lasting 45 to 60 minutes; and
- (b) Permission to review researcher's written summary for accuracy.

I will protect your identity by using a pseudonym. I may quote directly from the interviews in my dissertation, but I will protect your confidentiality by using codes and securing computer and printed documents at all times.

If you have questions about the research, please feel free to contact me by telephone at [REDACTED] or by e-mail at [REDACTED]. You may also contact the Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco, which is concerned with protection of volunteers in research projects. You may contact the IRBPHS office by calling (415) 422-6091 or by e-mailing IRBPHS@usfca.edu.

Your participation in this research study is voluntary. You are free to decline to be in this study or to withdraw from it at any time. Thank you for your consideration. If you agree to participate, please review the attached 2-page consent form. We can sign it together at our first interview session.

Sincerely,



Lily L. Chow
Graduate Student
University of San Francisco

Appendix D: Informed Consent Form

UNIVERSITY OF SAN FRANCISCO CONSENT TO BE A RESEARCH SUBJECT

Purpose and Background

Ms. Lily Chow, a graduate student in the School of Education at the University of San Francisco is conducting a study about the personal and structural conditions that affected the career decisions of foreign-trained immigrant schoolteachers who became California credentialed teachers. The researcher is interested in the life story of individuals in which people and events bear significance to their career interests, aspirations, expectations, commitment, and mobility.

I am being asked to participate because I am a native of China (includes Hong Kong and Taiwan), who earned a teaching credential and/or undergraduate degree outside of the United States, immigrated to the United States, became a California credentialed schoolteacher or in the process of earning my California teaching credential, and am a public K-12 schoolteacher or retiree in the San Francisco area.

Procedures

If I agree to be a participant in this study, the following will happen:

1. I will participate in two interviews with Ms. Chow, during which I will tell my life story. Each interview will take approximately 90 minutes. The interviews will be at a mutually agreed time and a private site that is convenient for me.
2. I will review Ms. Chow's written summary for accuracy and participate in a follow-up session lasting 45 to 60 minutes to clarify misunderstandings, discuss discrepancies, and add information.
3. All interviews will be audio recorded. All data (audiotape, written, and digital) from the interviews are for confidential research purposes only.

Risks and/or Discomforts

1. It is possible that during the interview, I may feel homesick with memories of my homeland and possibly anxiety in thinking about some of my experiences. However, I am free to decline to answer any questions I do not wish to answer or to stop participation at any time.
2. Participation in research may mean a loss of confidentiality. No individual identities will be used in any discussions, conversations, transcriptions, reports or publications pertaining to the study. Study records will be kept as confidential as is possible. Study information will be coded and kept in locked files at all times.
3. Because of the time required for my participation, I may become tired or bored.

UNIVERSITY OF SAN FRANCISCO
 CONSENT TO BE A RESEARCH SUBJECT
 (page 2)

Benefits

While there will be no direct benefit to me from participating in this study, the anticipated benefit of this study is a better understanding of the interrelationship between career decisions and human, social and cultural capital of immigrant professionals. This may foster the development of new strategies for evaluating knowledge, abilities and achievements of immigrant foreign-credentialed teachers that facilitate their employment in U.S. public schools and help the teacher shortage and retention problem.

Costs/Financial Considerations

The financial cost to me for participating in this study are those associated with my time and cost of travel to the interview sites.

Payment/Reimbursement

I will be not be paid nor reimbursed for my participation in this study.

Questions

I have talked to Ms. Chow about this study and she has answered any questions I have. If I have further questions about the study, I may contact her by telephone at [REDACTED] or by e-mail [REDACTED].

If I have any questions or comments about participation in this study, I should first talk with the researcher. If for some reason I do not wish to do this, I may contact the University's Institutional Review Board for the Protection of Human Subjects (IRBPHS), which is concerned with protection of volunteers in research projects. I may contact the IRBPHS office by calling (415) 422-6091, by e-mailing IRBPHS@usfca.edu, or by writing to the University of San Francisco IRBPHS, Department of Counseling Psychology, Education Building, 2130 Fulton Street, San Francisco, CA 94117-1080.

Consent

My participation in this research is voluntary. I am free to decline to be in this study, or to withdraw from it at any point. I have been given a copy of this consent form to keep.

My signature below indicates that I agree to participate in this study.

Subject's Signature

Date of Signature

Signature of Person Obtaining Consent

Date of Signature

Appendix E: Protection of Human Subjects Approval

Subject: IRB Application #10-033 - Approved

Date: Thu, 1 Apr 2010 09:05:59 -0700

From: USF IRBPHS <irbphs@usfca.edu>

To: <llchow@usfca.edu>

CC: <bloch@usfca.edu>

April 1, 2010

Dear Ms. Chow:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study.

Your application has been approved by the committee (IRBPHS #10-033).

Please note the following:

1. Approval expires twelve (12) months from the dated noted above. At that time, if you are still in collecting data from human subjects, you must file a renewal application.
2. Any modifications to the research protocol or changes in instrumentation (including wording of items) must be communicated to the IRBPHS. Re-submission of an application may be required at that time.
3. Any adverse reactions or complications on the part of participants must be reported (in writing) to the IRBPHS within ten (10) working days.

If you have any questions, please contact the IRBPHS at (415) 422-6091.

On behalf of the IRBPHS committee, I wish you much success in your research.

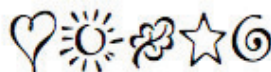
Sincerely,

Terence Patterson, EdD, ABPP
Chair, Institutional Review Board for the Protection of Human Subjects

IRBPHS – University of San Francisco
Counseling Psychology Department
Education Building – Room 017
2130 Fulton Street
San Francisco, CA 94117-1080
(415) 422-6091 (Message)
(415) 422-5528 (Fax)
irbphs@usfca.edu

<http://www.usfca.edu/humansubjects/>

Appendix F: Letter to Dissertation Committee



22 November 2010

Dear Drs. Bloch, Shimabukuro, and Koirala-Azad,

I have been seeking participants for my study using the network method since April 2010. I have contacted teachers that I know, school administrators, teacher organizations, churches, independent schools with Chinese language programs, and friends by email, telephone, and face-to-face meetings. In addition, I have made cold calls to teachers in the Bay Area. Teachers were not available to me as they were preparing for state standardized testing, conducting the tests, completing end-of-school year requirements, preparing for new school year lessons and events, and away during summer break.

I have completed interviews with one participant. I will start interviewing a second participant this week. I need three more participants. The current criteria for participant qualification are:

- (a) female natives of China (includes Hong Kong and Taiwan), who
- (b) earned their teaching credential or training outside of the United States,
- (c) immigrated to the United States,
- (d) became California-credentialed schoolteachers, and
- (e) currently teach in a public K-12 school in the Bay Area.

The two reasons that people decline to participate in my study are cultural reticence and lack of spare time. That said, I would like your permission to widen my criteria for participant qualification with the following:

- (a) recent public schoolteacher retirees, i.e., up to 5 years;
- (b) foreign-trained immigrant teachers in the process of earning their teaching credential in the United States;
- (c) males;
- (d) current teachers at independent or religious K-12 schools and community colleges; and
- (e) immigrants with undergraduate degrees and teaching experience with adults abroad, but are now public school teachers.

I appreciate your consideration and look forward to your response. Thank you.

Most respectfully,

Lily Chow

Appendix G: Protection of Human Subjects Modification Approval

Subject: IRB Modification Application #10-033 - Modification Approved
Date: Friday, December 17, 2010 8:17 AM
From: USF IRBPHS <irbphs@usfca.edu>
To: llchow
Cc: bloch

December 17, 2010

Dear Ms. Chow:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your modification request for human subjects approval regarding your study.

Your modification application has been approved by the committee (IRBPHS #10-033). Please note the following:

1. Approval expires twelve (12) months from the dated noted above. At that time, if you are still in collecting data from human subjects, you must file a renewal application.
2. Any modifications to the research protocol or changes in instrumentation (including wording of items) must be communicated to the IRBPHS. Re-submission of an application may be required at that time.
3. Any adverse reactions or complications on the part of participants must be reported (in writing) to the IRBPHS within ten (10) working days.

If you have any questions, please contact the IRBPHS at (415) 422-6091.

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,

Terence Patterson, EdD, ABPP
Chair, Institutional Review Board for the Protection of Human Subjects

IRBPHS ^ University of San Francisco
Counseling Psychology Department
Education Building ^ Room 017
2130 Fulton Street
San Francisco, CA 94117-1080
(415) 422-6091 (Message)
(415) 422-5528 (Fax)
irbphs@usfca.edu

<http://www.usfca.edu/soe/students/irbphs/>

Appendix H: Participant Fact Sheet

Participant Facts

Date: _____ Time: _____ Participant: _____

Setting: _____

Interview # _____ of 3 Consent Form: Yes _____ No _____

Pseudonym _____

Origin (China / HK / Taiwan) / urban or rural: _____

Family size (# of siblings): _____

Parents occupation(s): _____

Family socioeconomic status: _____

Foreign-Education: _____

Foreign-trained teacher of: _____

Grade levels: _____ Average class size _____

Subject(s): _____

Arrival in United States (year) _____ Location: _____

Children?: _____ Female: _____ Male: _____ Immigrant _____

Reason to emigrate: _____

Why the United States? _____